

NEXUS

NEW TIMES MAGAZINE

Volume 11, Number 3

APRIL – MAY 2004

UK/Europe edition

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PUBLISHED BY

NEXUS Magazine Pty Ltd, Australia

EDITOR

Duncan M. Roads

CO-EDITOR

Catherine Simons

ASSISTANT EDITOR/SUB-EDITOR

Ruth Parnell

UK Office Manager

Marcus Allen

CONTRIBUTORS THIS ISSUE

Vladimir Z. Nuri; Sherrill Sellman;

Prof. Dr Harold D. Foster; Rochus Boerner;

John V. Milewski, PhD;

Tony Bushby; Sandie Gustus

CARTOONS

Phil Somerville

COVER GRAPHIC

John Cook, jscocook@ozemail.com.au

PRINTING

Goodhed Print Group, Bicester, Oxon., UK

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Seymours, London, UK

UK OFFICE - 55 Queens Rd, East Grinstead,
West Sussex, RH19 1BG.

Ph: 01342 322854; Fax: 01342 324574

e-mail address: nexus@ukoffice.u-net.com

Website: www.nexusmagazine.com

EUROPE OFFICE - PO Box 48, 1600 AA

Enkhuizen, The Netherlands.

Ph: +31 (0)228 324076; Fax: +31 (0)228 312081

e-mail address: nexus@fsf.nl

HEAD OFFICE - Articles, Reviews, etc.

PO Box 30, Mapleton, Qld 4560, Australia.

Ph: +61 7 5442 9280; Fax: +61 7 5442 9381

e-mail address: editor@nexusmagazine.com

ITALY OFFICE - c/- Avalon Edizioni, Piazz

Mazzini 52, 35137 Padova, Italy

Ph/Fax: +39 (0)49 912 6006

e-mail address: info@nexusitalia.com

USA OFFICE - 2940 E. Colfax, #131,

Denver CO 80206 USA

Tel: 303 321 5006; Fax: 720 941 9352

E-mail: nexususa@earthlink.net

STATEMENT OF PURPOSE

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Editorial

Greetings, and welcome once again to the pages of NEXUS Magazine. First up in this issue, we have an article on Fractional Reserve Banking as Economic Parasitism. This was extracted from a lengthy, in-depth analysis of the effects of lending out more money than actually exists, and draws an analogy with a parasite feeding off a host system. The full paper examines and compares money flow in closed systems to several of our sciences, including electronics and fluid dynamics. However we have selected extracts which show that the practice of fractional reserve banking is detrimental to the overall health and welfare of the system upon which it literally "preys".

Increasing numbers of children across the planet are experiencing puberty well before the normal biological age range expected for this. Author Sherrill Sellman couldn't stand the mainstream media's relative silence on the issue and has written an article designed to inform us on the cause and prevention of precocious puberty. Hormone and endocrine disruptors are implicated in this disturbing trend amongst young children today.

Still on health, Dr Harold Foster presents his latest research and findings on what he believes to be the cause of schizophrenia and the best way to treat or prevent it. It's another important article which everyone would do well to read and consider.

This issue sees the conclusion of the article on examples of suppression of new and contradictory theories in physics. Relativity, the speed of light not being a constant, antigravity and the Big Bang theory all come under scrutiny in an article that reveals that what we are told in the mainstream science press is not always the full picture.

Speaking of light, I highly recommend you all read the article on SuperLight in Science News. It's also sure to excite many people interested in crystals.

Some years ago when Dr James Hurtak visited Australia, he showed a select group of students a video allegedly taken under the Giza Plateau in Egypt. The video really impressed the viewers, who conveyed to me descriptions of temples, buildings, statues and much more. While in Australia, Dr Hurtak spoke at the NEXUS Conference and made no mention of the above video or events. But that hasn't stopped hundreds of people asking me, to this day, whether the NEXUS Conference video of Dr James Hurtak's presentation has *that* video footage. It doesn't, and I'm told that not even Dr Hurtak has the video anymore. I've watched the story go around the Internet at regular intervals and I tire of emailing scores of replies on the matter. Hopefully this editorial mention will reduce my workload!

Luckily for all those who are curious about mysterious cities and temples under the Giza Plateau's Pyramids and Sphinx complex, we have an intriguing story about those very discoveries from Tony Bushby, author of *The Secret in the Bible* and *The Bible Fraud*.

Interest in out-of-body experiences and astral travel continues to grow. More and more books are being written about these topics but, conversely, there are very few organisations dedicated to exploring this experience. The two main groups I know of are the Monroe Institute, based in the USA, and the International Academy of Consciousness (IAC), based in the UK, Europe and Brazil. This issue we have an article from the IAC that gives a good overview of the subject and is important reading, too.

Readers who dabble in exploration of the many unexplained phenomena and anomalous case studies in our world (and beyond) will be stunned by John Titor's story in the Twilight Zone section. John is/was a self-confessed time traveller from the year 2036. His "arrival" on various chatgroups on the Internet in late 2000 triggered a lot of interesting debate. After his "departure" in March 2001, people were left with more questions than answers. John made some remarkable statements about events to come, the science of time-travel and life in his future. In late 2000, he said civil war in the USA would start around 2004/2005 and continue for a decade, culminating in a World War. He said American foreign policy would make the United States so hated that eventually it would be attacked by other nations, including Russia. Above all, John warned of events that would lead to the removal of nearly all civil rights and freedoms and to the US launching attacks on several nations. At the time, in late 2000, this seemed impossible to most people, but then came 9-11, the War on Terror, the removal of many human rights and freedoms, and the rest of the world's growing dismay at the antics of the US government. We've selected just some of John's comments, and I found myself viewing them in a much different light today, over three years later.

Remember, information is power! Until next time,

Duncan

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Letters to the Editor ...

Mycoplasma Warfare?

Dear Editor: I have read three wonderful articles by Dr Donald Scott about Mycoplasma [see one in NEXUS 8/05], and I am in shock to say the least.

I have MS, fibromyalgia/CFS, asthma, a degenerative spine condition, spinal stenosis, arthritis, ideopathic heart palpitations, osteoporosis, the list goes on—all being autoimmune conditions.

I also had polio-encephalitis at the age of three, when there were outbreaks of this in California and Texas in the mid-1940s.

A retired military doctor who did research into this went into private practice, and when I went to him with a cold he immediately asked if he could examine me. He noticed that my muscles weren't reacting properly. After the exam, he said that I had polio-encephalitis—which had been suggested when I had a neuro-encephalogram and arteriogram when I was 15 years old. Since then it has been confirmed.

I would like to know where I can read material on where mycoplasma was sprayed on unsuspecting residents of Canada and the United States. So many of my friends are also sick with MS, fibromyalgia, lupus, etc. It has been bothering me, wondering why so many autoimmune conditions suddenly showed up in our population. Seems as though they appeared shortly after the Vietnam War.

It is amazing that we haven't seen a commercial on TV for us to call an attorney who is handling a class action suit against the government. I am sure you have seen these types of commercials: for instance, if you took a certain drug and had serious side-effects, large law firms will advertise on TV that there is a class action suit and for you to contact them.

So, what I need are links to where I can find out where and when the mycoplasma was sprayed, and the statistics for medical conditions that have shown up since those dates.

I want to see documentation, although I must admit that I already believe what I have read.

This is absolutely appalling for our government to have caused such horrible medical conditions—even AIDS, which seemed to appear in the late 1970s and was first brought to public attention in 1980, with full-blown news in 1982.

I thank you so much for your time and consideration, and look forward to hearing from you.

Vicki Lee

[Dear Vicki: I suggest you contact Dr Donald Scott at the Common Cause Medical Research Foundation in Sudbury, Ontario, on (705) 670 0180, or Dr Leonard Horowitz via <http://www.tetrahedron.org>. Ed.]

Enzyme Supplements

Dear Duncan: It seems I have been waiting forever for the final article on Enzyme Nutrition [11/02] in order to learn what enzymes can be bought and for what conditions. Sadly, the article did not cover this, much to my dismay.

As with vitamin supplements, I assume one can buy enzyme supplements, but what and for what and how is a mystery. The article at its end says "What better way to ensure our health...than to...supplement with enzymes where needed". You can imagine my frustration at the absence of a "ready reckoner" list of what to buy! Can you persuade the author to follow up this excellent article with some user-friendly advice?

Thank you for contributing to my continued sanity through your unique magazine!

Best wishes,

John Bremner, Devon, UK

[Dear John: Availability of good-quality plant enzyme supplements varies from country to country. If your local health food shop can't help, I suggest you try over the Internet. Ed.]

Questions on Raw Food Diets

Dear Duncan: As a long-time satisfied reader of NEXUS, I was somewhat disappointed to go on the Net and find in short time a website that shows much of Edward Howell's work is, well, not up to par! [See "Enzyme Nutrition Therapy", 10/06.] It seems that there is more to the Pottenger cat story and it wasn't correctly reported by him, either.

There is much evidence at this site indicating a raw diet isn't necessarily the full bottle, either. In fact, in light of my recent study, Howell's work is quite dated.

The Beyond Vegetarianism website can be found at <http://www.beyondveg.com> and is an excellent effort towards balance and level-headed debate on the whole raw/veg/vegan/frutarian/instinctive and several other "isms" debacle.

Titles include "Lesson of the Pottenger's cats experiments: cats are not humans"; "The debate over Edward Howell's theory of food enzymes"; "Why do cooked or dense foods improve raw/vegan health"; "Ape diet myths"; "What kind of combined raw/cooked diet? Making intelligent choices".

Other articles question the validity of the argument on the nutritional losses with cooking, and it seems like hundreds of others, including the articles published by NEXUS on "The Myths of Vegetarianism" [9/03-04]. In the interest of wide debate and clear thinking, I would recommend all to read as much of this website as possible. It's certainly made me relax a lot!

I was getting quite uptight about my ability to sustain a raw diet. I had tried raw foods a couple of decades ago and kept it up for two years, but my variation included small amounts of cheese and Vogel's bread.

Towards the end I began craving, of all things, a burger. I relinquished and wondered why it had to be a burger—yuk!

Keep up the good work.

Regards,

Paul Jury, South Australia

[Dear Paul: The point of the articles was to educate people about the role and importance of enzymes. As with many other diets, some people benefit, some react adversely, others seem to show no change. We have given you the info on enzymes; what you do with it is up to you. Your cravings may indicate a lack of B12, which is common in vegetarians and vegans. Ed.]

Genesis World Energy Scam?

You did an article on Genesis World Energy and their "Edison Device" a while back [10/02]. I have made numerous attempts to contact them recently regarding availability of their products and have had no results.

I have recently talked to someone who had apparently received approval for a licence to distribute, but who has since not had any communication with Genesis. In some ways it smells of a scam, but I still have some hope.

Do you have any new info on these guys? Any info would be appreciated. Thank you.

Rance Foulston, Edmonton, Canada

PS: Since I sent you my email, I have been led to this website: <http://members.cox.net/john.lichtenstein/business.htm>. What do you think of it?

While I believe many of us are hopeful that technology which taps into the abundance of energy which surrounds us will soon be available, I also believe that this hope leaves us open to deception.

Arriving at the truth is not a simple task. From your statements regarding the intended purpose of your magazine, I take it that you like to "get to the bottom of things".

Perhaps you would consider doing more on Genesis World Energy, even if it isn't legit. Thanks again.

... more Letters to the Editor

NB: Please keep letters to approx. 150 to 250 words in length. Ed.

[Dear Rance: One of the reasons we published the Genesis World Energy material was to try to entice further information on the matter from amongst our many readers. We remain curious and yet still hopeful that, one day, someone will successfully make a non-polluting energy system freely available to all. Ed.]

NEXUS Banned in Vic Prisons?

Dear Duncan: I was very happy to receive the latest NEXUS issue, Feb–March 2004 [11/02]. Obviously, the authorities here at the prison where I'm located have deemed the latest issue "non-threatening" to the accepted world reality.

I subscribed to NEXUS a year ago, and have only been allowed to receive at least half of the issues sent to me via the mail.

When the Iraq War began, I was informed that your publication is now on the banned list within all Victorian prisons. Mind you, I'm yet to read any memo detailing this.

Reading between the lines, it's obvious that our government wishes to suppress information that challenges the status quo, and prisons seem to be an easy net for them to do so. Perhaps a taste of things to come in the wider world?

I haven't decided whether or not I will renew my subscription, but please keep doing what you are doing, as your printed Statement of Purpose indicates.

Most appreciatively,
P. D., Victoria, Australia

Subliminals, False Clips on TV

Dear Duncan: Thank you for your fantastic magazines. I get withdrawal symptoms if I don't get to read your magazine every issue these days.

Letters to the Editor last issue [11/01] had a letter informing about the propaganda advertisement shown on Channel 7 [Australia]. I saw it, too! And not only that time, as they broadcast the same advertisement two

days later, about 1–2 hours later than the time of the first ad I saw on Channel 7. It was broadcast around 4.30 to 5.30 pm, in one of the advertising slots. The second occasion, it was broadcast some time between 6.30 and 7.30 pm.

I was watching these two ads in Adelaide. I was horrified to see it the first time; I almost doubted my eyes, thinking I had to be hallucinating to see such an obvious propaganda job.

But when I saw the same ad again on Channel 7, I was disgusted that someone thinks that we, the ordinary citizens, are so stupid that we wouldn't ask any questions about what we were shown in such a public domain as TV that not only adults but also kids are watching.

Also, there was a news item on 15 January about Mt Aso in southern Japan erupting. This news clip was shown all through the day on different channels. It showed the mountain, and the smoke was furiously coming out from the mouth of the volcano. It was a nice, sunny day when they shot this clip, whenever they did.

The thing is, I checked with Japanese people as to how the situation was going yesterday and today [16 January], and surprisingly found out that the news is completely false. Mt Fuji is starting to wake up, but there was no news about Mt Aso written on Internet.

Maybe it means that the clip was used in MI6 style to send an important message to someone, which may involve Japan. Whatever is happening, it must be a big thing for them to contact agents in such manner public. I'm just hoping it is nothing to do with a nuclear plant meltdown or something equivalent.

Thanks for reading on!
"L", Australia

Umno Hoax and Disclosure

Dear all: I was fascinated by the recent Umno article [11/02], and as a bit of a researcher myself I had to admit that this

one was new to me.

I looked up the website given, and found that both that and the earlier ones were now defunct; but I did turn up this website, <http://www.strangemag.com/ummo.html>, which seems to explain very comprehensively the whole lot as an experiment that unexpectedly fooled a whole group of people before it finally petered out (as far as I am aware).

The names, dates and background the article gives seem pretty hard to refute, and after expecting a pretty impressive Umno site the last thing I expected was an admission!

I don't know if the editor and writer had read and dismissed this article, but, if they had, I'd like to know the grounds they used to give more credit to the Ummites, who appear to have gone quiet, judging from their lack of web presence.

On an unrelated subject, which I would recommend as important for NEXUS investigation, is the total lack of enthusiasm by the media for Dr Steven Greer's Disclosure Project, now that the full report has been out for a reasonable time [see NEXUS 9/01].

I have only read extracts so far, but am surprised the powers-that-be are able to treat it in the same dismissive manner as the average UFO report, which the Project certainly isn't.

If you can find a reporter to do a follow-up on the (non) response to the Project a year or two on, this would be highly useful.

Sorry to be the bearer of bad tidings about Umno, but I thought it was better to pass this on than ignore it.

I always have an open mind when I follow up articles, or I wouldn't continue to buy NEXUS regularly.

Yours faithfully,
David Howard, London, UK

[Dear David: The websites quoted are still up as far as I can see, and nowhere is there a satisfactory explanation to prove the

Umno case a hoax. I would not be so quick to write this off, based on your criteria above. It is often by airing information on cases like this one that new information comes to light. There is no new information at those websites to which you refer. Ed.]

Bill of Rights

Hi: I think the magazine is great, but some things seem over the top. I keep an open mind, however, because we just don't know for sure what is going on, do we? Apart from the obvious.

Please can we see something about the Bill of Rights of 1689? Everyone, especially politicians in Australia and New Zealand, seems to make excuses for the reasons they don't want us to have guns, and when the Bill of Rights 1689 is mentioned, or our right to be armed for our protection according to law, they moan on about the American 2nd Amendment.

The US Bill of Rights came straight from the Bill of Rights 1689, but, to make sure their Rights were safe, they made their version of the old Bill.

It is very obvious to anyone who has read it in full that *everything* in the Bill of Rights 1689 is *still fully legal*, today and into the future, and it cannot be repealed, amended, revoked or modified, now or ever.

The People of Oz and NZ are not fully aware of the Bill of Rights 1689, and that our Rights are still legally recognised by the Bill.

Why is it, then, that our governments keep all this from us and treat us like crims?

Thank you for your time.

Best wishes,

Paul F. McCourt, Turangi, New Zealand

[Dear Paul: We are planning to publish an article on Common Law in a forthcoming issue, and this will also include discussion on the Bill of Rights. Stay tuned. Ed.]

GLAXO SAYS MOST DRUGS DON'T WORK ON MOST PATIENTS

A senior executive with Britain's biggest drugs company has admitted that most prescription medicines do not work on most people who take them.

Dr Allen Roses, worldwide Vice-President of Genetics at GlaxoSmithKline, said fewer than half of the patients prescribed some of the most expensive drugs actually derived any benefit from them.

It is an open secret within the drugs industry that most of its products are ineffective in most patients, but this is the first time that such a senior drugs boss has gone public.

Drugs for Alzheimer's disease work in fewer than one in three patients, whereas those for cancer are only effective in a quarter of patients. Drugs for migraines, osteoporosis and arthritis work in about half the patients, Dr Roses said.

Most drugs work in fewer than one in two patients, mainly because the recipients carry genes that interfere in some way with the medicine, he said.

"Roses is a smart guy, and what he is saying will surprise the public but not his colleagues," said one industry scientist. "He is a pioneer of a new culture within the drugs business based on using genes to test for who can benefit from a particular drug."



Dr Roses has a formidable reputation in the field of "pharmacogenomics"—the application of human genetics to drug development—and his comments can be seen as an attempt to make the industry realise that its future rests on being able to target drugs to a smaller number of patients with specific genes.

"Neither those who pay for medical care nor patients want drugs to be prescribed that do not benefit the recipient. Pharmacogenetics has the promise of removing much of the uncertainty," Dr Roses said.

(Source: The Independent, UK, 8 December 2003)

DRUG COMPANIES KNEW HRT RISKS FIVE YEARS BEFORE THE PUBLIC

Drug companies knew about the health risks surrounding hormone replacement therapy (HRT) five years before members of the public were informed.

Thousands of women may have been put at unnecessary risk because they were involved in HRT trials when experts knew that the menopause treatments increased the risk of heart disease.

But the data, collated by the drug companies for licensing applications for their HRT products, was kept secret and not published. Experts who tried to raise concerns about HRT were ridiculed.

Researchers say the HRT case exposes the "strong vested interests and biased reporting" in the way drugs are licensed and tested by pharmaceutical companies.

(Source: The Independent, UK, 28 February 2004)

PENTAGON GEARS UP FOR SPACE-BASED WEAPONS

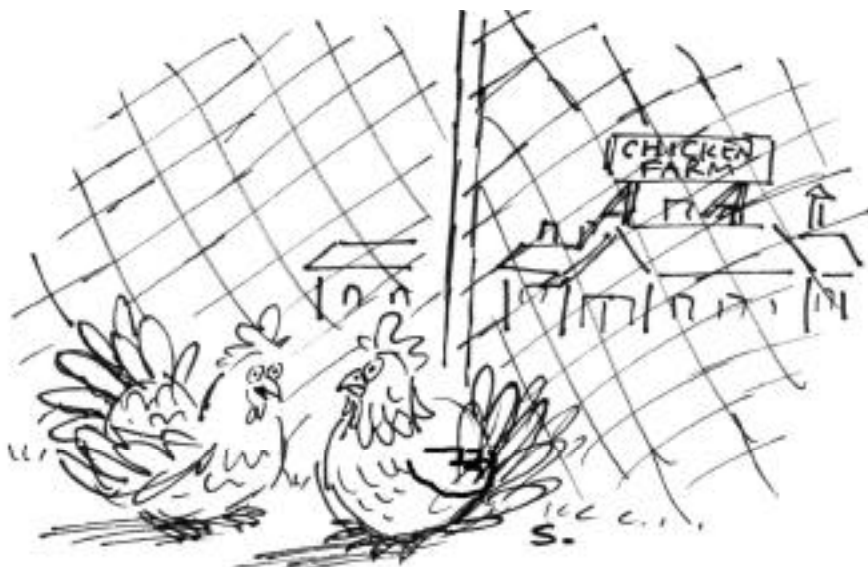
A United States Air Force report is giving what analysts call the most detailed picture since the end of the Cold War of the Pentagon's efforts to turn outer space into a battlefield.

The US Air Force Transformation Flight Plan, released last November, makes US dominance of the heavens a top Pentagon priority in the new century. And it runs through dozens of research programs designed to ensure that America can never be challenged in orbit—programs from anti-satellite lasers to weapons that "would provide the capability to strike ground targets anywhere in the world from space".

Space has become an increasingly important part of US military efforts. Satellites are used more and more to talk to troops, keep tabs on foes and guide smart bombs. There's also long been recognition that satellites may need some sort of protection against attack.

But the Air Force report goes far beyond these defensive capabilities, calling for weapons that can cripple other countries' orbiters.

That prospect worries some analysts that the United States may spark a worldwide arms race in orbit.



"They're working on something to stop this 'flu from killing us, so they can restore confidence to the business of killing us themselves."

... GLOBAL NEWS ...

This year, the US Air Force will spend hundreds of millions of dollars to find ways to track enemy satellites and, if necessary, blind those eyes in the sky.

So far, space-based arms are legal. The Outer Space Treaty of 1967 only bans nuclear weapons and other weapons of mass destruction from orbit.

Over the years, US administrations have looked into developing such weapons—most notably, as part of President Reagan's "Star Wars" anti-missile initiative.

Defense Secretary Donald Rumsfeld has long advocated sending arms into orbit. Just before taking office in 2001, he chaired a commission on space and national security which warned that the country could face a "space Pearl Harbor" in the years to come. This calamity must be avoided, the commission declared, asserting that the best way to do that is to "vigorously pursue the capabilities...to ensure that the President will have the option to deploy weapons in space".

(Source: Wired Magazine, 20 February 2004, <http://www.wired.com>)

FDR'S CLOSEST ADVISER WAS A SOVIET SPY

The British government has announced that former Soviet KGB archivist Vasili Mitrokhin, 81, died from pneumonia on 23 January.

Mitrokhin first came to the public's attention in 1999 with the publication of *The Sword and The Shield*, an exposé of the KGB and its operations in the US and Europe. The book was based on notes and materials from classified KGB files, copied by Mitrokhin from 1972 until his retirement in 1984. He defected in 1992 and his materials were later spirited out of Moscow by British agents.

Accuracy in Media first reported on Mitrokhin's revelations shortly after the book's publication. Reed Irvine particularly valued the book for providing "new evidence" that Harry Hopkins, Franklin D. Roosevelt's closest and most influential adviser, was a Soviet spy.

Mitrokhin turned to British intelligence, where his materials eventually led to the identification of several Soviet spies in both Britain and the United States. Among these were Melita Norwood, who admitted giving British nuclear secrets to the Soviets, and a former Scotland Yard policeman, who became the KGB's first "Romeo spy".

[Editor's Note: Readers may recall our

publishing excerpts of *From Major Jordan's Diaries* (see NEXUS 4/01, 4/02), detailing the covert handover of A-bomb materials to the Russians. It is clear that Harry Hopkins was not acting alone in helping arm the Soviet Union. Another case of manufacturing your own (bogus) enemy?]

(Source: Accuracy in Media, 4 March 2004, http://www.aim.org/publications/media_monitor/2004/03/03.html)

NERVE CELLS GROWN ON CHIP CAN COMMUNICATE

Researchers at the University of Calgary, Canada, have found that nerve cells grown on a microchip can learn and memorise information which can be communicated to the brain.

"We discovered that when we used the chip to stimulate the neurons, their synaptic strength was enhanced," said Naweed Syed, a neurobiologist at the University of Calgary's Faculty of Medicine.

The nerve cells also exhibited memory traces that were successfully read by the chip, said Syed, co-author of the landmark study published in the February edition of the international journal *Physical Review Letters*.

The research was done in collaboration with the Max Planck Institute for Biochemistry in Munich, Germany.

The team cultured nerve cells from a snail and placed them on a specially designed silicon chip. Using a microcapacitor on the chip, scientists stimulated one nerve cell to communicate with a second cell which transmitted that

signal to multiple cells within the network. A transistor located on the chip then recorded that conversation between cells.

Syed said the discovery is groundbreaking. "We've made a giant leap in answering several fundamental questions of biology and neuro-electronics that will pave the way for us to harness the power of nanotechnology," he said.

The findings could help in the design of devices that combine electronic components and brain cells—for example, for controlling artificial limbs or restoring sight for the visually impaired.

Future research will focus on interfacing silicon chips with the human brain to control artificial limbs and develop "thinking" computers.

(Source: The Globe and Mail, Toronto, Canada, 2 February 2004)

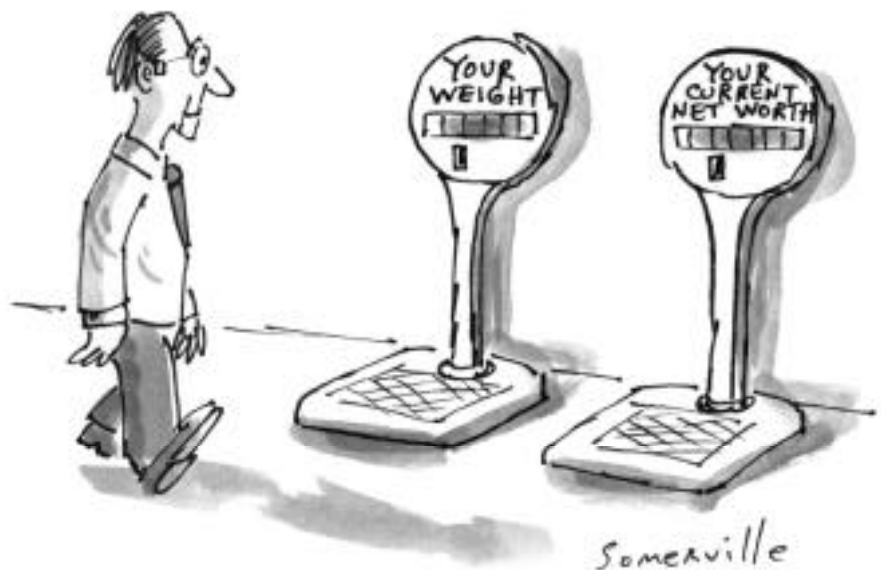
FORMER ASTRONAUT ADMITS "WE ARE NOT ALONE"

The sixth man to walk on the Moon, Apollo XIV astronaut Edgar Mitchell, declared "The aliens have landed" in front of more than 200 admirers at a conference in St Petersburg, Florida, in February.

"A few insiders know the truth...and are studying the bodies that have been discovered," he said.

Mitchell, who landed on the Moon with Alan B. Shepard, said a "cabal" of insiders stopped briefing presidents about extraterrestrials after President Kennedy.

Dr Mitchell, who has a science doctorate from the Massachusetts Institute of Technology, noted that 30 years ago it was accepted that man is alone in the Universe.



... GLOBAL NEWS ...

Few people believe that now, he said.

Besides aliens, Mitchell talked about being freed of prostate cancer during a healing ceremony and about his epiphany while returning from the Moon.

(Source: St Petersburg Times, Florida, USA, 18 February 2004, <http://www.sptimes.com/>)

BRAIN FINGERPRINTING: THE FAILSAFE LIE DETECTOR?

Seattle, Washington — A controversial technique for identifying a criminal mind using involuntary brainwaves that could reveal guilt or innocence is about to take centre stage in a last-chance court appeal against a death-row conviction in the United States.

The technique, called "brain fingerprinting", has already been tested by the FBI and has now become part of the key evidence to overturn the murder conviction of Jimmy Ray Slaughter, who is facing execution in Oklahoma.

Brain fingerprinting, developed by Dr Larry Farwell, chief scientist and founder of Brain Fingerprinting Laboratories, is a method of reading the brain's involuntary electrical activity in response to a subject being shown certain images relating to a crime. During the test, the suspect wears a headband equipped with sensors that measure the electrical activity.

Unlike the polygraph or lie detector to which it is often compared, the accuracy of this technology lies in its ability to pick up the electrical signal, known as a p300 wave, before the suspect has time to affect the output.

"It is highly scientific. Brain fingerprinting doesn't have anything to do with the emotions, whether a person is sweating or not; it simply detects scientifically if that information is stored in the brain," says Dr Farwell.

"It doesn't depend upon the subjective interpretation of the person conducting the test. The computer monitors the information and comes up with information present or information absent."

Brain fingerprinting has profound implications for the criminal justice system.

(Source: BBC News, World Edition, 17 February 2004, <http://news.bbc.co.uk/2/hi/science/nature/3495433.stm>)

DRUG COMPANY-FUNDED TRIALS HAVE MORE FAVOURABLE RESULTS

The public is being regularly deceived by the drug trials funded by pharmaceutical companies, loaded to generate the results they need, according to the editor of the *British Medical Journal*.

Pharmaceutical companies spend hundreds of millions of pounds to bring a new drug to market, and tens of millions of pounds to do the clinical trials that are necessary for both registration and marketing. Understandably, they prefer *not* to get results from these trials that are unfavourable to their drug.

A review published in 2003 found 30 studies that had compared the results of trials funded by drug companies with those funded by other sources. Trials funded by companies were four times more likely to

have results favourable to them than those funded by others.

All this matters greatly because 70 per cent of trials in major medical journals are funded by the drug industry. Companies often buy reprints of these articles to use in promoting their drugs.

Virtually all research on drugs is funded by the industry, because governments have taken the view that public money can be better spent elsewhere.

The end result is that information on drugs (on which Britain spends £7 billion a year) is distorted.

(Source: The Guardian, 14 January 2004)

MONSANTO'S GM FAILURE

A showcase project to develop a genetically modified/engineered crop for Africa has failed.

Three years of field trials have shown that GM sweet potatoes modified to resist a virus were no less vulnerable than ordinary varieties, and sometimes their yield was lower, according to the Kenya Agricultural Research Institute. Embarrassingly, in Uganda, conventional breeding has produced a high-yielding resistant variety more quickly and more cheaply.

The GM project has cost Monsanto, the World Bank and the US government an estimated US\$6 million over the past decade. It had been held up worldwide as an example of how GM crops will help revolutionise farming in Africa. One of the project members, Kenyan biotechnologist Florence Wambugu, even toured the world promoting the work.

Monsanto says it plans to develop further varieties.

(Source: New Scientist, vol. 181, no. 2433, 7 February 2004)

REMOTELY TRIGGERED CAR IMMOBILISERS ON THE WAY

The battle to cut car crime is moving up a gear with the advent of immobilisers that can be triggered remotely.

A control box fitted to the car incorporates a miniature cellphone, a microprocessor and memory, and a GPS satellite positioning receiver. If the car is stolen, a coded cellphone signal will tell the unit to block the vehicle's engine management system and prevent the engine being restarted. There are even plans for immobilisers that shut down vehicles on the move, though there are fears over the safety implications of such a system.

For now, such devices are only available



for fleets of trucks and specialist vehicles used on construction sites. But remote immobilisation technology will soon start to trickle down to ordinary cars, and should be available in the UK in two months.

In the USA, fear of litigation is discouraging the whole idea of using remote immobilisers: no one wants to be responsible for, say, blocking ambulance access.

Police in the UK would like to see cars fitted with immobilisers that could be activated while the thief is driving along. They argue this would enhance road safety by putting an end to high-speed car chases. (Source: *New Scientist*, vol. 181, no. 2435, 21 February 2004)

WRONG DIAGNOSES ARE KILLING PATIENTS

Many patients in intensive care units are being wrongly diagnosed, according to a study in a UK hospital. Some are dying because doctors fail to spot major conditions such as heart attack, cancer and pulmonary embolism. The reason, experts say, is not incompetence but that so few post-mortems are now performed that doctors cannot learn from their mistakes.

Fang Gao Smith, a consultant in intensive care medicine at Birmingham Heartlands Hospital, and her team checked the accuracy of diagnoses by comparing post-mortem results with patients' medical records. In 39 per cent of cases, they found major problems had been missed.

The problem is not limited to one hospital or to the UK. Gao Smith says her findings are consistent with other studies done in Europe and the US. She thinks doctors place too much faith in sophisticated scanners when making diagnoses and are failing to learn from their mistakes because fewer and fewer autopsies are being done, both in the UK and the US. "If we did more post-mortems, it might be possible to save more people in the future," Gao Smith says. The decline needs to be reversed as a matter of urgency, she says.

The study also raises the question of how many other patients are being misdiagnosed. Gao Smith says the frequent misdiagnoses in intensive care units should set alarm bells ringing in other areas of medicine. "It's not always possible to talk to intensive care patients. But they are also scrutinised and monitored more than any other patients, so I'm not sure we can say that they are more likely to suffer misdiagnosis."

(Source: *New Scientist*, 21 February 2004)

THE TEN WORST CORPORATIONS OF 2003

by Russell Mokhiber and Robert Weissman © 2004

Here follows, in alphabetical order, the *Multinational Monitor* list of the 10 worst corporations of 2003.

Bayer: In May, the company agreed to plead guilty to a criminal count and pay more than US\$250 million to resolve allegations that it denied Medicaid discounts to which it was entitled. The company was beleaguered with litigation over its anticholesterol drug, Baycol. Bayer pulled the drug—linked to a sometimes fatal muscle disorder—from the market, but is facing thousands of lawsuits from patients who allege they were harmed by the drug.

Boeing: In one of the grandest schemes of corporate welfare in recent memory, Boeing engineered a deal whereby the Pentagon would lease tanker planes—767s that refuel fighter planes in the air—from Boeing. The price tag of US\$27.6 billion was billions more than the cost of simply buying the planes. The deal may unravel, though, because the company fired for wrongdoing both the employee who negotiated the contract for Boeing (the company's chief financial officer) and the employee who negotiated the contract for the government. How could Boeing fire a Pentagon employee? Simple. She was no longer a Pentagon employee. Boeing had hired her shortly after the company clinched the deal.

Brighthouse: A new-agey advertising/consulting/strategic-advice company, Brighthouse has a claim to infamy with its Neurostrategies Institute. In a cutting-edge effort to extend and sharpen commercial reach in ways never before possible, the Institute is using MRI to monitor brain activity and response triggered by advertisements and advertising campaigns.

Clear Channel: The radio behemoth Clear Channel specialises in consuming or squashing locally owned radio stations, imposing an homogenised music playlist on once-interesting stations and offering cultural support for US imperial adventures. It has a record of violating the law—including prohibitions on deceptive advertising and broadcasting conversations without obtaining permission of the second party to the conversation—on 36 separate occasions over the previous three years.

Diebold: An Ohio-based company that is one of the largest US manufacturers of electronic voting machines as well as an aggressive peddler of these machines, Diebold has managed to demonstrate that it fails any reasonable test of qualifications for involvement with the voting process. Its CEO has worked as a major fundraiser for President George W. Bush. Computer experts revealed serious flaws in its voting technology, and activists showed how careless it was with confidential information. Diebold threatened lawsuits against activists who published on the Internet company documents showing its failures.

Halliburton: The company which initially drafted plans for privatisation of US military functions during the Bush I administration—when current Vice President and former Halliburton CEO Dick Cheney was Secretary of Defense—is pulling in billions of dollars in revenue from contract work—providing logistical support ranging from oil to food—in Iraq. Tens of millions, at least, appear to be overcharges. Some analysts say Halliburton's charges for oil provision amount to "highway robbery".

HealthSouth: Fifteen of its top executives have pleaded guilty in connection with a multibillion-dollar scheme to defraud investors, the public and the US government about the company's financial condition. It appears that HealthSouth itself will get off scot free—no indictments, no pleas, no fines, no probation.

Inamed: The California-based company sought Food and Drug Administration approval for silicone breast implants, even though it was not able to present long-term safety data—the very thing that led the FDA to restrict sales of silicone implants a decade ago. In January 2004, the FDA denied Inamed's application for marketing approval.

Merrill Lynch: Fresh off a US\$100 million fine levied because analysts were recommending stocks that they trashed in private emails, the company saw three former executives indicted for shady dealings with Enron. Merrill Lynch itself managed to escape with something less than a slap on the wrist—no prosecution in exchange for "oversight".

Safeway: One of the largest US grocery chains, Safeway is leading the charge to demand give-backs from striking and locked-out grocery workers in southern California. Along with Albertsons and Ralphs (Kroger's), Safeway's Vons and Pavilion stores are asking employees to start paying for a major chunk of their health insurance. Under the company's proposals, workers and their families will each lose US\$4,000 to \$6,000 a year in health benefits.

(Source: Authors' article posted 5 February 2004 at <http://lists.essential.org/pipermail/corpfocus/2004/000173.html>. Russell Mokhiber edits the Washington, DC-based Corporate Crime Reporter, <http://www.corporatecrimereporter.com>; Robert Weissman edits the Washington, DC-based Multinational Monitor, <http://www.multinationalmonitor.org>)

FRACTIONAL RESERVE BANKING AS ECONOMIC PARASITISM

Privately owned money expansion is equivalent to a surreptitious, state-sanctioned plundering of money-holder wealth by private bankers, and is an insidious yet real and ubiquitous system of economic parasitism.

by Vladimir Z. Nuri

© March 2002, February 2004

Email: vznuri@yahoo.com

Extracted from his 62-page paper, freely available at website:
<http://econpapers.hhs.se/paper/wpawuwpm/0203005.htm>

A SCIENTIFIC, MATHEMATICAL and HISTORICAL EXPOSÉ, CRITIQUE and MANIFESTO

INTRODUCTION

The dynamics of money is an extremely complicated subject. It's a foremost preoccupation of humans, as in the way money system mechanics is intricately woven into major plotlines of complex and influential popular fiction works such as Rand's *Atlas Shrugged*¹ and Stephenson's *Cryptonomicon*.² Extrapolated, it even becomes a "social energy system" theme in more futuristic or outlandish forms, such as that emerging from the popular science fiction movie *The Matrix*.³

Possibly the full leverage of focused worldwide scientific inquiry and attention has yet to be applied to economics. Some evidence that the science is still in its infancy is that new fields of "economic physics" or "econophysics" and "computational finance" (also dubbed "phynance") have been proposed only recently.^{4,5,6} Physicists are applying statistical and computational modelling techniques to come up with creative, *ad hoc* or highly realistic theories of money flow in, for example, large economies and stock markets.⁷ Objective scientific commentators sensitive to these kinds of shifts and trends could easily identify (despite the overused cliché) all the signs of an apparent Kuhnian "paradigm shift"⁸ in progress.

The analysis presented here is heavily dependent in places on the economy-as-ecosystem concept and mostly takes it as unequivocally justified and virtually proven, even though it is not a common perspective among mainstream economists and the underlying research agenda is clearly only beginning. Nevertheless, building on it, an important additional theme proposed and explored here is that of *economic parasitism*.

A BRIEF HISTORY OF MONEY

Paper money was not used by Europeans until the Middle Ages; its introduction in that era was partly due to the discovery of its successful use in China by Marco Polo in the 13th century. The Greeks and Romans used coins.

It is useful here to review some standard terminologies (see, e.g., Griffin⁹ and Naylor¹⁰):

- **Commodity money** – money that is made out of a commodity, e.g., typically a precious metal, either gold or silver, i.e., coins.
- **Receipt money** – also called "fully backed commodity money".¹¹ A goldsmith or banker issues paper receipts or certificates always redeemable for an exact quantity of precious metal, and the receipts may be traded independently.
- **Fractional money** – money that is backed by reserves or a commodity at only a fraction of the face value. It's also called "fractionally backed commodity money"¹² and "bank money" or "book credit".¹³ For purposes here, the exact fraction is considered to be fixed in perpetuity.
- **Fiat money** – money that is declared (sole) "legal tender" by a government, with no specifically guaranteed reserve or commodity backing; or, for purposes here, money denomination associated with arbitrarily permissible manipulation, or variation of total available quantity, via mere accounting changes unrelated to precise reserves or backing (made by the money controlling and tracking authority, not necessarily the same as the government), rather than any fixed commitment to any fraction of reserves or backing.
- **Paper money** – For purposes here, money in the form of paper notes, i.e., "banknotes". Depending on backing, it could be receipt, fractional or fiat money. Many

authors use it as a synonym for fractional or fiat money to contrast it with commodity money.

• **Electronic money** – For purposes here, money as reduced to an abstract accounting process involving abstract currency-units, or "blips", no longer requiring a physical medium for transfer. It is also called "digital cash" or "cybercash". Depending on backing, it could be receipt, fractional or fiat money.

In basic so-called "economics" history (e.g., as Griffin¹⁴ and Rothbard,¹⁵ e.g., explain), money ostensibly issued as receipt money to depositors was often surreptitiously, clandestinely or illicitly corrupted into fractional or fiat money by bankers. The bankers found they could temporarily lend out additional pseudo-certificates exceeding their collected inventory of gold and collect interest on these loans. Rothbard notes that this practice was ruled legal by courts in some historical cases. Griffin asserts this practice invariably leads to an inherently unstable money system and periodic runs on banks, with many historical examples to make his case. Griffin also asserts that fiat money always leads to hyperinflation and worthless currency. These views are reappraised here with slightly different conclusions.

Debasement, Counterfeiting and Embezzlement

Immediately upon any inquiry into money, the topics of *debasement* and *counterfeiting* arise. Someone can take a gold coin, clip or shave it down and pass on that coin, or create entirely fake coins with no gold content. Complicating the picture is that the government itself may adopt debasement of the currency as an official state policy! Many authors have blurred these cases. So, a strict definition of these different forms of debasement is required:

• **Counterfeiting** – The outlawed, criminal practice of debasing the currency or creating fraudulent money.

• **Publicly owned money expansion** – At the knowledge, consent and service (and, ultimately, control) of the public citizenry, the government systematically but restrictedly devalues the currency by allocating itself ownership of new, previously unowned/unallocated currency-units (represented by paper banknotes on demand) via the accounting system—implemented as an official policy to generate a revenue stream other than direct taxation, with proceeds spent on legitimate government/public services.

• **Privately owned money expansion** – The situation mentioned above, where, instead, private bankers retain the sole authority (understood to be officially delegated by the government) to control the same currency-unit accounting mechanism and own the associated revenue stream, referred to as "profit" or "revenue" by the bankers' terminology (conceivably with a "cut" going to select depositors and shareholders—or none at all).

Counterfeiting is equivalent to theft. The criminal obtains tangible *assets* as booty in the collective robbery of *all who use the currency*. However, it is not an overt theft that a victim is readily aware of, as it is, say, when their car has been stolen and is missing. *Embezzlement* is more accurate, presuming it is eventually detected!

As is widely understood by economists and the general public,

both counterfeiting and publicly owned expansion lead to or, more accurately, *cause* widespread *inflation* of prices and, if uncontrolled, destabilisation of the integrity of the overall money system. Often governments have had draconian laws against counterfeiting practices, regarding them as equivalent to acts of sabotage, treason or war. Some wars have actually been waged partly via the very effective technique of one country's counterfeiting another's currency and "buying" (in actuality, *confiscating*) resources with it. In this sense, it is a *camouflaged seizure of assets*, or *economic warfare*. Whereas pillaging is sometimes the goal of warfare, counterfeiting permits an *invisible* pillaging with no arms or army required!

The third case above, privately owned money expansion, is not so sharply delineated in the economics literature or popular treatments and is typically mixed up with the other two cases. This is a catastrophic error, as will be considered below. For reference, call this the *cui bono, caveat emptor* error (Latin for "Who benefits? Let the buyer beware!").

The above account hides further detail and mixes terminology based on the modern perspective.

Two Banking Systems: Central and Noncentral

From the historical standpoint, a nation can have two kinds of banking or money systems:

• **Centralised banking** – A universal, standardised, official government currency is controlled and issued by a *central bank*.

• **Noncentralised banking** – Different banks may issue their own receipt money as currency, also called "banknotes". The different banknotes circulate simultaneously in the overall economy.

Worldwide, most nations now have their own central banks, at the end of a long history of complex economic and political events. American and inter-

national history has involved eras of alternation between centralised and noncentralised banking systems; currently, the US has centralised banking.

In the United States, the central bank is known as the Federal Reserve; it was established in 1913. Note that *a central bank may be either publicly owned or privately owned*. However, despite its name and management protocols, *the US Federal Reserve is privately owned*. The assumption that a central bank is always publicly owned is the same *cui bono caveat emptor* error.

Seigniorage

In economics literature, the word "seigniorage" is typically used as a synonym for money expansion. Seigniorage is revenue or a profit taken from the minting of coins, usually the difference between the value of the bullion used and the face value of the coin.

In a fractional money system, the mechanism for money expansion is different (not associated with minting coins) but with the same effect.

Here, a very careful distinction must be made. The following are *separate and distinct*, but they are sometimes confused by neophytes or are unclear in some accounts. The terminology is somewhat arbitrary (remarkably, there does not seem to be a standard terminology devised by other commentators).

"By this means, government may, secretly and unobserved, confiscate the wealth of the people, and not one man in a million will detect the theft."

— John Maynard Keynes

• **Straight borrowing** – A government borrows money via issuing bills or bonds at a discount on face value, promising to repay the purchaser the face value at some specified date in the future. The interest rate is the difference between the face value and the purchase price. Money accounting totals are strictly tied to actual reserves or revenue. As an example, US state governments use straight borrowing.

• **Expansion borrowing** – The government may also borrow via money expansion, with newly allocated currency units functioning as national economy shares that are either publicly or privately owned. The money accounting totals are divorced from direct relation to actual reserves or revenue, under the control and ownership of the money manipulation authority. Virtually all national governments use expansion borrowing. Even though, in this case, the standard overt procedure of "selling a bond" seems identical to the prior case of government borrowing, the underlying mechanisms and effects of the transaction are *fundamentally different*.

Note that both cases involve a "shortfall of funds", but the first case does *not* constitute seigniorage whereas the second does. If a government's expenditures exceed revenue (government revenue is generally from taxes), it can make up some difference via borrowing such that additional funds become available via a free-market loan by bond-holders. Demand for these bonds is mainly tied to the interest rate offered by the government; higher interest rates spur higher demand. However, even after the "auction of debt", the additional available borrowed funds may still be inadequate to cover a budget deficit fully. In that case, another last resort (other than raising bond interest rates) is *money expansion*. Hence the latter case can be considered, in a sense, a "double shortfall" (a shortfall of demand or of buyers agreeing to loans).

A further key distinction must be made on money expansion. A bank may lend funds either to individuals or to the government. In the former case, typically the "noncentral" bank lends funds deposited by other individuals. In the latter case, typically the government borrows money from the nation's central bank, which controls issuance of the nation's currency; that is, when the bank buys government bonds. In either case, if the bank has assets on deposit equivalent to the borrowed funds, it's "straight borrowing". If only a fraction of the loan is backed by assets, it's "expansion borrowing". This latter case is called *fractional reserve banking* (or lending, or borrowing). The fraction of deposits to loans that a bank is required to hold is called the *reserve requirement*.

Hence money expansion can be localised to a given bank's own banknotes in the noncentral system, or affect the entire nation's currency in the case of a central bank. In terms of the *cui bono, caveat emptor* error, most economics literature does not apply or blurs the concept of the central bank's owning assets to back the government loans, not using the idea of a "reserve requirement" relative to it.

The above establishes an important direct correspondence between *commodity or receipt money* and straight borrowing, and *fractional or fiat money* and expansion borrowing. Moreover, the two types may be practised by either noncentral banks or a central

bank. The banks may further be either publicly owned or privately owned. An even more precise distinction requires more sophistication than this overview and is pursued further below.

In economics literature and popular accounts, the following two cases are also not always carefully distinguished. Current prices in an economy may shift under two *separate, distinct* key factors:

• **Supply and demand** – Demand for a particular good or service may fluctuate due to changing economic conditions. This is the "invisible hand" of Adam Smith's theory. The value or demand of the underlying assets has changed.

• **Money manipulation** – Wherever there is not a strict policy commitment by the monetary authority to a one-to-one or invariable accounting relation between money units and assets (i.e., basically fiat money, or other systems corrupted into fiat money, maybe advertised or feigned otherwise), the total money units can be arbitrarily modified or varied under the title of "money expansion". The intrinsic value or demand of the underlying assets is not changed.

Adjustments in conventional taxes, on the other hand, have uneven and unpredictable effects which are notoriously difficult to anticipate by government agencies, politicians, legislatures, experts, economists and the public alike.

"Thus, our national circulating medium is now at the mercy of loan transactions of banks, which lend not money but promises to supply money they do not possess."

— Irving Fisher (1936)

The economist Keynes helped analyse the process of publicly owned money expansion and considered the ensuing inflation as a pernicious "hidden tax" on the masses. However, many monetary reformists have proposed publicly owned money expansion as a very useful means of taxation superior to alternatives, *presuming it is limited and erected with the full knowledge and political*

consent of citizens (see, for example, Gause¹⁶). Via such a system:

• The state can obtain spendable revenue that requires no vast, complex and cumbersome accounting system in the way the income tax, for example, does.

• It also is an extremely uniform taxation system, representing a per cent of every dollar in circulation, in contrast to every reported dollar or every dollar in only particular types of transactions. Conventional taxes, on the other hand, have uneven effects which are notoriously difficult to anticipate by a legislature.

• Tax evasion is essentially impossible under publicly owned money expansion—precisely as inescapable as inflation!

Privately Owned Money Expansion

Consider the strange worldwide case of privately owned money expansion. Here, a private bank is allowed to issue banknotes based on fractional reserves, i.e., lend out more money than it has in reserves, either to a government or to citizens. The idea of money expansion as equivalent to a fractional reserve system is not an explicit observation of modern economics, but it's transparently identical.

With straight borrowing, a lender provides immediate *money-energy* in return for the money-energy returned plus a fee at a future time. (That fee, "interest", may therefore be regarded as the price or market rate of instantaneous money-energy per repayment time.) But by the money-energy conservation principle, *no money-energy is provided by the lender via privately owned money expansion*; this holds regardless of changes in GDP. The "illusory" money-energy that is spent by the borrower is

accumulated via the depreciated value of the lender's fractional money—inflation. *Ergo, pseudo-lending.*

In short, in this situation, all money-holders' assets denominated in terms of the banknotes depreciate relative to the ratio of banknotes issued to the bank's assets. If the banknotes are universally standardised as with a central bank (i.e., legislated as the [sole] "official legal tender), then for simplicity the three distinct groups (a) "money-holders", (b) "taxpayers", (c) "citizens" can all be taken to overlap and be roughly interchangeable.

Even more shocking, in the modern, privately owned money-expansion system, the lending bank is essentially allowed to count the "loan" as an *asset, immediately*, and is not required to wait until the end of the repayment period of the pseudo-loan to do so. Hence debt is "monetised" as a "security".

BLIP CORRUPTION

Over the centuries, many commentators and authorities have struggled to articulate these ideas using vocabulary that itself has been correspondingly debased.

The process of money expansion is typically called "creating money", and the *pseudo-money* that is *pseudo-lent* by the *pseudo-bank* is typically referred to as "credit". But also within the literature, dire confusion or obfuscation reigns on the "razor-sharp" *cui bono, caveat emptor* distinction set out here between publicly owned versus privately owned money expansion. This intellectual error has potentially catastrophic consequences. The former case can be a legitimate means for collection of government revenue. Because of widespread public ignorance, the latter stands currently as *unexposed embezzlement*. The manufacturing of abstract credit is a means for *real wealth extraction!*

Banking authorities make a distinction between deposits and loans in the same way they distinguish between money and credit. In the nonphysical fractional reserve blip-based money system, the distinction is invalid. *Creation of credit is equivalent to the creation of money.* Whoever has or is given the authority to create credit has the authority to extract wealth from the economy by that same mechanism. Moreover, there is no meaningful distinction between fractional reserve banking and money expansion.

The analogy of counterfeiting looms large, as the mathematics reveals [covered elsewhere in the full paper; Ed.]. In many ways, the only difference between illegal counterfeiting and legal, privately owned money expansion is that gains by the recipient in the latter case are officially sanctioned, not indiscriminate, and limited based on the expansion rate. Therefore, paradoxically, privately owned money expansion is basically equivalent to legalised counterfeiting, i.e., *a surreptitious, state-sanctioned plundering of money-holder wealth by private bankers!*

Perhaps the simplest explanation for this situation is that *new shares of the economy are issued, but they are owned by private bankers at the expense of the ownership by all other shareholders* (i.e., money-holders, taxpayers, citizens). Via mere money manipulation, the private bankers own a greater real share of the entire economy (e.g., GDP denominated in dollars). Hence the

term "money stock" takes on a new meaning!

The tragic absurdity of the situation has reached epic proportions worldwide. All the complex economic theory, terminology and mathematics could simply be dropped for the following explanation. The government has delegated its responsibility of ensuring public monetary integrity to private bankers. But the arrangement has devolved and degenerated to negligence and abdication. Those bankers have reneged on the implicit promise of providing monetary integrity. Their system correctly meticulously keeps track of "blip" ownership and its transfer, except that, via the delegated ownership and administration of the blip system, and under the guise of *specious, distorted and flawed economic science*, the bankers can arbitrarily and unrestrictedly create and own new "blips", and thereby a greater share of real national wealth!

What has occurred is an unequivocal *corruption* in the integrity of the money. Money is a representation means for *scarcity*. Holders utilise it precisely for that property. Any entity that can allocate scarcity units without exerting economic work by definition has debased the scarcity units relative to all other holders; the units are not scarce for the embezzler. Somewhere along the line, the implicit promise of integrity has been *trashed*.

The holders of the scarcity units determine the definition of economic work. Legitimate government services are included. The government is established partly to protect scarcity unit ownership and regulate legal and illegal scarcity unit transfer. Privately owned expansion is equivalent to siphoning or *leeching* of money-energy, with dollar-holders "left out in the cold".

"The money power preys on the nation in times of peace, and conspires against it in times of adversity. It is more despotic than monarchy, more insolent than autocracy, more selfish than bureaucracy. It denounces, as public enemies, all who question its methods or throw light upon its crimes."

— Abraham Lincoln

ECONOMIC PARASITISM

Mere belief in a religion may have a relatively innocuous effect on practitioners if it doesn't demand major "sacrifices"—except that, as history shouts, economic policy according to superstition is inescapably disastrous. Slavery, in contrast, is today regarded as a moral horror or even poison. But even these disturbing charges may pale in capturing the accurate reality of a corrupt blip system.

Smith noted an "invisible hand", Keynes noted the "invisible tax", and prior sections of this paper [not reprinted here; Ed.] considered the possibility of an "invisible caste system" promoting "invisible slavery". Invisibility can be especially treacherous. A more diabolical metaphor is required.

Invisibility is a common theme in the earlier descriptions. Rothschild noted the "class of the few who can understand the system, interested in its profits, or so dependent on its favours". Abraham Lincoln referred to the "money power that conspires and preys on the state". ("Conspire" means "to plan together secretly to commit an illegal or wrongful act or accomplish a legal purpose through illegal action".) In the strongest indictment possible, Thomas Jefferson referred to "maniacal, delusional, corrupt, swindling bank-mongers". Jefferson attempted to make a careful distinction between banks with seigniorage fees and those practising fractional reserve banking via "foisting their own paper

into circulation, and thus banishing our cash". Alan Greenspan referred to money debasement as "an insidious process".¹⁷

What these accounts all have in common is an attempt to distinguish legitimate from illegitimate banking practices, and the contents of this paper are designed to nail down that dichotomy even further via mathematical precision. But they are also referring to a sort of "hidden alien force" that transcends the existing conceptual boundaries of government and banking.

They warn of it as an almost indescribably dangerous phenomenon, almost an entity. Earlier in this paper [section not reprinted here; Ed.] this was referred to as the "mechanisms, elements and agendas capable of, and at times applying, money-energy extraction without consent of money-holders via concealment within the money system administration" that may reside in either government or banking institutions. (To borrow Eisenhower's neologism on the "military-industrial complex", call it the "government-banking complex".) Along these lines, privately owned expansion was also concluded to be a *leeching*.

These accounts all converge to describing *parasitism*. Hence, insight from biology on parasites becomes relevant and applicable. A parasite is "an organism that grows, feeds and is sheltered on or in a different organism while contributing nothing to the survival of its host".

The idea of parasitism in economics or society is millennia old (an alternative meaning of "parasite" as "a professional dinner guest" dates to the Greek era!), but historically was typically applied to people who refused or evaded work. Zimmer¹⁸ gives a colourful overview in his chapter, "Nature's Criminals", that weaves from ancient to modern times with stops at Darwinism and even Nazism. The idea of wealth-owners as parasites is a more recent invention.

The standard form of worldwide fractional reserve banking is synonymous with privately owned money expansion. It is not generally regarded as harmful; in fact, it is seen as intrinsic to the institution of banking. But by the prior mathematical findings, it inequitably leeches money-energy from all citizens, taxpayers and money-holders. Therefore, fundamentally, *fractional reserve banking is equivalent to economic parasitism*.

From the prior analysis, one immediate question is: how could a privately owned money expansion system possibly have been erected?

As Griffin,¹⁹ Mullins²⁰ and many others have accused, *the Federal Reserve was erected surreptitiously, clandestinely and possibly even via subterfuge(s)*. Griffin refers to the Federal Reserve as "The Creature from Jekyll Island", where the scheme of its founding was hatched in collusion and strict secrecy in 1910 among the world's most powerful bankers of the time. The "creature" is a *parasite*. Jefferson's "tribe of bank-mongers", Adams's "moneychangers", Lincoln's "money power", Garfield's "absolute master of all industry and commerce", Rothschild's "class of the few who can understand the system...so dependent on its favours", Greenspan's "welfare state" and Griffin's "creature" are all simply describing the parasite attaching to the host organism—the government banking complex—while evading its normal defence mechanisms such as open legislative hearings, public review and debate, expert scrutiny, etc.

For purposes here, the hypothetical entity will now be called "the money parasite". Jefferson warned in his time that "it has

seized by its delusions and corruptions all the members of our governments, general, special and individual". So, has it survived?

Griffin²¹ summarises the strategy of the Jekyll Island colluders who founded the Federal Reserve as "to convince Congress and the public that the establishment of a banking cartel was, somehow, a measure to protect the public". The plan was one of bait-switching, distraction, diversion, even deception:

1. Do not call it a cartel nor even a central bank.
2. Make it look like a government agency.
3. Establish regional branches to create the appearance of decentralisation, not dominated by Wall Street banks.
4. Begin with a conservative structure including sound banking principles, knowing that the provisions can be quietly altered or removed in subsequent years.
5. Use the anger caused by recent panics and bank failures to create popular demand for monetary reform.

6. Offer the Jekyll Island plan as though it were in response to that need.

7. Employ university professors to give the plan the appearance of academic approval.

8. Speak out *against* the plan to convince the public that Wall Street bankers do not want it.

What Griffin is describing is a *stealth invasion by the money parasite into the government-banking complex host body*, based on subtle sabotage of its social defence mechanisms via diversion, distraction and deception.

The integrity of legitimate banking and government institutions is debased exactly in parallel to the money itself. The quasi-government, quasi-bank netherworld duality serves as a subterfuge to evade the established checks and balances within either system.

Smoke and Mirrors, Sleight of Hand

Joseph Stiglitz is the former Chief Economist for the World Bank and International Monetary Fund (IMF). He resigned, or was fired, from the World Bank in 1999 over his ideological differences. In 2001, he shared the Nobel Prize for Economics. After disillusionment over the effects of the IMF's policies, he went public that same year with scathing criticisms that reverberated through the world's media. He outlined a four-step process by which a developing country is ravaged by the influx of capital, aided and abetted by the IMF. He described the process as "squeezing the last drop of blood out of them".²²

This case depicts an epic break in the status quo of economists.²³ The IMF and World Bank can be compared to an international financial rescue agency—much like an economic "doctor". Stiglitz is asserting that its prescription is always for bloodletting via leeches. In a word, *parasitism*. Moreover, he rejected any supposed or purported fundamental rationality of the policy and concluded the ideological underpinnings were corrupt from inception. In other words, there was no legitimate economic science behind the practices, or whatever existing economic justification used was a sham. As reporter Greg Palast writes:²⁴

Stiglitz has two concerns about the IMF/World Bank plans. First, he says because the plans are devised in secrecy and driven by an absolutist ideology, never open for discourse or dissent, they "undermine democracy". Second, they don't work...

A parasite is "an organism that grows, feeds and is sheltered on or in a different organism while contributing nothing to the survival of its host."

Ultimately, what drove him to put his job on the line was the failure of the banks and US Treasury to change course when confronted with the crises, failures, and suffering perpetrated by their four-step monetarist mambo.

Other examples of "dissension within the ranks" of economists are easily spotted. Friedman is one of the most vocal and influential economists who has focused on and been critical of monetary expansion policies.²⁵ He's also attempted to convey to the public the intrinsic relationship between monetary expansion and inflation. His approach can be seen as a strong rejection of the Keynesianism that dominated monetary policy in the first half of the 20th century.

Strangely, even at the end of the "postmodern age" and dawn of the 21st century, bulletproof principles for governing mass world economies via an "economic science" still seem open to constant debate, revision and reversal.

ECONOMIC WARFARE

Earlier it was observed that governments have historically regarded counterfeiting as a treasonous crime. Counterfeiting can destroy the economic integrity and vitality of an entire nation. It can be used as a mechanism of state sabotage, and it is even regarded as an act of war if advanced by one country on another.

Widespread counterfeiting, lawlessness and anarchy are sometimes the historical progression of collapsing empires. Indeed, M. A. Rothschild asserted, "Let me issue and control a nation's money and I care not who makes its laws".

By all the previous verbiage, the difference between counterfeiting and money issuance can be a very subtle matter—"razor sharp". For purposes here, we loosely define "economic warfare" as "state-sponsored counterfeiting used as a means of seizure of assets and establishing control over another country."

The metaphor of "invisible slavery" was applied earlier to economic parasitism. Economic warfare likewise can have the very treacherous property of invisibility. If a nation's currency is being counterfeited without detection, *or assets seized and control lost via an equivalent process*, it seems equivalent to a means of waging invisible warfare.

Now, suppose that two private banks, A and B, are competing to extract money-energy from a given economy. Suppose that the owners of bank A manage to incite clandestinely a run on the reserves of bank B by its depositors, such as by spreading rumours of collapse. Bank B fails, and its assets then may come under the control of bank A. If undetected, bank A appears to have successfully waged "economic warfare" against bank B by attacking and seizing "economic territory".

Such attack is not necessarily limited to collapses. Bank B may not totally fail due to the run, but be significantly weakened from a decline in its reserves from withdrawals. The economic leverage of bank A is still commensurately increased. In a sense, bank B's money has been undermined from an economic oscillation. On a smaller scale, exactly the same principle is involved in numerous real, identified and illegal "pump-and-dump" stocktrading scams regularly investigated by the Securities Exchange Commission.

Substitute "nation A, B" for "bank A, B", "national currencies" for "bank deposits", and this gives the theoretical background of a worldwide economic warfare technique. Moreover, if the losses are made up by taxpayers, it essentially becomes *state financed*. Bailouts may fail dangerously to address the core disease and maybe even unintentionally *mask or promote it*.

The analogy applies on international levels. Different nations have currencies that are backed by their reserves. Nations become analogous to individual banks in a larger world economy. Currency exchange rates are a measure of the *leverage* of one currency against another. If a nation expands the circulation of its own fractionally backed money outside its borders, this is totally analogous to banks that increase circulation of their debased money. This means that *one nation can seize the assets of another, based on money manipulation*.

Now, note the basic parallel between a collapse of a bank due to a run, and mass failure or default of loans made by the bank. Suppose corrupt private bank C lends mass funds to an accomplice D; then D defaults, but with kickbacks to C. The government bails out the "failed" loans of bank C.

These are extremely crucial, initially counterintuitive situations to observe. Bank failures, bailouts, loans or aid can be *disguised weaponry for waging economic warfare* against either domestic or foreign citizens and governments by a supranational piratical cartel system independent of and inimical to all of them.

Moreover, *government-funded bank bailouts may have the unintended effect of feeding the money parasite*.

These are the money system analogues of *infiltration of the government-banking complex's*

immune system.

Hence large-scale currency machinations, especially during "crisis situations" such as "currency swaps" tied with foreign money devaluations by the Federal Reserve, can be seen as weapons for waging mass worldwide economic warfare—the invisible annexation of foreign assets.

In 1970, the IMF created a new monetary unit called the SDR, or "Special Drawing Right". Griffin quotes author Dennis Turner:²⁶

SDRs are turned into loans to Third World nations by the creation of checking accounts in the commercial or central banks of the member nations in the name of the debtor governments. These bank accounts are created out of thin air. The IMF creates dollars, francs, pounds or other hard currency and gives them to a Third World dictator, with inflation resulting in the country where the currency originated... Inflation is caused in the industrialized nations while wealth is transferred from the general public to the debtor country. And the debtor doesn't repay.

Turner is simply describing the process of fractional reserve banking as a tool for money parasitism used by the IMF on an *international scale*. By definition, international money parasitism wages economic warfare. But equivalently, such a situation can be regarded as a *domestic invasion and subjugation by an invisible foreign army*—from the host's perspective, the very definition of attack by a parasite.

"I believe that banking institutions are more dangerous to our liberties than standing armies. Already they have raised up a monied aristocracy that has set the government at defiance. The issuing power [of money] should be taken away from the banks and restored to the people to whom it properly belongs."

— Thomas Jefferson

"Four steps to damnation"

Possibly the single most extraordinary, *damning* item of circumstantial evidence for the existence of an organised economic warfare program is the document called *Silent Weapons for Quiet Wars*.²⁸ This very narrowly known document purports to be a training manual for the science of "quiet wars" waged against the populace. It includes amazing scientific and mathematical descriptions very similar to the prior sections [not reprinted here; Ed.]. It has much material relating to "debilitated host psychology", using the depiction adopted here.

The document has never been widely published anywhere except in very obscure locations and on the Internet. The scientific community seems to be unaware of it or ignoring it. It's been circulated in small circles for at least a decade, though the author is unknown. Any serious researcher looking into economic slavery, parasitism or warfare must be absolutely familiar with the manual. However, since its legitimacy and authenticity are so easily questioned by the literal minded, it cannot serve as any form of definite evidence. Other avenues must be pursued to make the case for economic warfare.

One excellent recent item along these lines is the incendiary article, "IMF's four steps to damnation", by reporter Greg Palast.²⁹

During an IMF conference in Washington in 2001, he interviewed former World Bank and IMF Chief Economist Joseph Stiglitz. Stiglitz openly charges that the lending program is really one accomplishing economic subjugation not unlike colonialism, only that it is implemented economically rather than militarily. He has reduced the IMF *modus operandi* relative to developing nations, describing it by more-religious capitalist doublespeak:

- **Privatisation** – State industries are sold off after the countries shave billions off the prices of electricity and water companies, with "commissions" (kickbacks) going to the country's politicians.

- **Market liberalisation** – Stiglitz refers to this as the "hot money" cycle. Cash comes in for real estate and currency speculation and then "flees at the first whiff of trouble". The nation's reserves that back the currency are drained sometimes in days. The IMF demands the nations raise interest rates to the astronomical ranges of 30 to 80 per cent.

- **Market-based pricing** – The nation is required by the IMF to raise prices on the staples of food, water and cooking gas. This has a disproportionately heavy cost on the poor.

- **Social unrest** – Also known as "the IMF riot". Step "three and a half" occurs at this point, as the IMF "squeezes the last drop of blood out of them, turning up the heat until the whole cauldron blows up" when food and fuel subsidies for the poor are eliminated (Indonesian riots, 1998; Bolivia, 2000; Ecuador, 2001). Secret IMF plans coldly anticipate the likely "social unrest".

- **Free trade** – Free trade by the rules of the World Trade Organization and the World Bank is analogous to the Opium Wars. Trade barriers are knocked down in foreign countries, but with financial blockades in return.

The consistently recurring riot stage noted by Stiglitz is evidence of the *link between money parasitism, violence and destruction*. In overt warfare, armies engage in bloody confrontations on a battlefield. In covert economic warfare, a riot may be seen as a *symptom of or reaction to the invisible invasion*.

High Crimes and Treason

If a covert plan of economic warfare has been waged, it may have international rather than mere national implications, as various commentators have charged. Counterfeiting on a national level is a treasonous crime against that nation. However, it seems reasonable to classify international-scale economic warfare as a "crime against humanity". Accusations on this level have been made by US Senators on several occasions.

Senator James Traficant entered a vocal (not legal) indictment against international agencies and the Federal Reserve into the Congressional Record in 1993, referring to *undeclared economic war and economic slavery*:³⁰

Federal Reserve Notes (FRNs) are unsigned checks written on a closed account. FRNs are an inflatable paper system designed to create debt through inflation (devaluation of currency). Whenever there is an increase of the supply of a money substitute in the economy without a corresponding increase in the gold and silver backing, inflation occurs... The Federal Reserve Bank who controls the supply and movement of FRNs has everybody fooled. They have access to an unlimited supply of FRNs, paying only for the printing costs of what they need.

The receivers of the United States Bankruptcy are the International Bankers, via the United Nations, the World Bank and the International Monetary Fund... This is an undeclared economic war, bankruptcy, and

economic slavery of the most corrupt order!

"In essence, these countries end up buying back their own money, but at incredibly high rates. And this is just the beginning of the IMF's involvement."

— Gregory Palast²⁷

An extremely extensive accusation of about 13,000 words was entered into Congressional Record by Representative Louis T. McFadden in 1934:³¹

Mr Chairman, we have in this Country one of the most corrupt institutions the world has ever known. I refer to the Federal Reserve Board and the Federal Reserve Banks, hereinafter called the Fed. The Fed has cheated the Government of these United States and the people of the United States out of enough money to pay the Nation's debt. The depredations and iniquities of the Fed have cost enough money to pay the National debt several times over.

This evil institution has impoverished and ruined the people of these United States, has bankrupted itself, and has practically bankrupted our Government. It has done this through the defects of the law under which it operates, through the maladministration of that law by the Fed and through the corrupt practices of the moneyed vultures who control it.

Speaking at the height of the US Great Depression, McFadden gave ample historical information that mirrors Griffin's account.³² McFadden asserted that the foreign bankers used the system to finance and foment entire wars. He insinuated that there was a covert agenda to create "a superstate controlled by international bankers and international industrialists acting together to enslave the world for their own pleasure". "I do not like to see vivisections performed on human beings," he said.

McFadden had a thorough listing of crimes and individuals he charged. He said, "I charge them, jointly and severally, with the crime of having treasonably conspired and acted against the peace and security of the US and with having treasonably conspired to destroy constitutional Government in the US".

McFadden was Chairman of the House Banking and Currency Committee for a 10-year period and survived two apparent assassination attempts. By some accounts, McFadden died in "suspicious circumstances" in 1936.

If "international bankers" have indeed extracted vast fortunes from the United States and other countries globally, one might guess they have erected vast, hidden, economic empires. Such financial empires certainly exist and are documented and acknowledged, but obviously not as any entrenched international parasitic system.^{33, 34}

Any attempt to identify and disengage any supposed existing parasite system must face and contend with the vast historical battlefield littered with prior, apparently failed, attempts.

TOWARDS FULL INTEGRITY

An extraordinary problem with money parasitism is that, arguably, laws against "money laundering" could conceivably be construed as *parasitism enforcement mechanisms*. So, increasingly draconian measures to track all privately circulating currency are installed, such as in the US by the secret agency known as FinCen, as profiled in *Wired Magazine* by Anthony Kimery in his 1993 article, "Big Brother wants to look in your bank account".³⁵ Similarly, the European Parliament investigated the use of the NSA's (US National Security Agency) worldwide *Echelon* electronic surveillance system against charges of *economic espionage*.³⁶

Some innovators are proposing and erecting new money systems that are locally oriented and community based.^{37, 38, 39} That is certainly a strong possibility, but again they may be illegal by invasive state laws that require reporting both gifts and barter transactions and subjecting both to taxation.

A parasitic money system fundamentally has three major requirements that are arguably now already fully installed worldwide: (a) any money must be exclusively in the form of the state-authorised currency; (b) all economic transactions are subject to taxation; and (c) loss of government control over the central bank.

Ultimately, the issue largely comes down to whether individuals have the *right to make economic transactions between themselves, free of state surveillance or interference*.

US and international laws and legal administrations currently do not appear to support such a right. Coincidentally, this is precisely the same question surrounding the legitimacy of any

taxation, and the same flashpoint for the American Revolution of Independence.

In any case, a new realisation of fractional reserve banking as a kind of *fractional integrity or vitality system* must enter the mass consciousness, along with the full understanding that the modern economic and political systems based on it are therefore deeply and intrinsically flawed—to borrow the informal yet highly descriptive term, *rotten at the core*.

All the associated doublespeak must be discredited and cleared away for any meaningful or widespread changes to occur. Humanity finds itself entering the 21st century with a mediaeval monetary system. Maybe some of its intense energy directed towards technological innovation can be channelled towards a state-of-the-art money system upgrade. Maybe money is the ultimate technological tool of humanity!

It's conceivable that this all hints at a new, previously unrecognised form of energy—say, *monergy*—that might be tamed with the full force of scientific and engineering discipline applied to it. Econophysics shows some promise along these lines, but a new revolutionary realm of science and engineering might be born that merges politics and economics.

Correspondingly, the government-banking complex could merge and evolve into a new institutional system that corrects the present flaws in exactly the same way, e.g., as the well-intentioned, creative and visionary founders of the United States of America attempted in their time.

Editor's Note:

Because of space constraints, we are unable to publish the endnotes that accompany this article. However, they are included with the article on our website, <http://www.nexusmagazine.com>. Readers who have no Internet access can request a copy of the endnotes from any of our NEXUS offices.

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About the Author:

Vladimir Z. Nuri is thirty-three and lives in Denver, Colorado, USA. He has a Bachelor of Science in software engineering and has designed and written software for over 20 years in many programming languages. He wrote award-winning software for neurobiological experiments and imaging for four years at a university. He has worked in diverse jobs in industry, including with two dot-coms—one specialising in educational software, its shares now publicly traded on the NASDAQ. He specialises in open source, Linux, databases/datamining and web programming.

Mr Nuri has researched the hidden elements of economics over many years, focusing on its aspects as a complex ecosystem or energy machine, involving the property of "efficiency" subject to optimisation and control. His investigations have culminated in this paper, published originally on an Internet economics papers archive in March 2002. In 1998, he founded an email group/blog exploring the role of algorithmics in technology; today it has over 950 subscribers.

Vladimir Nuri's complete 62-page paper, containing much more detailed analysis/research, is freely available at the website <http://econpapers.hhs.se/paper/wpawuwpm/0203005.htm>. To contact the author, email him at vznuri@yahoo.com.

THE PROBLEM OF PRECOCIOUS PUBERTY

Early sexual development, or precocious puberty, is a growing problem around the world; and while endocrine disruptors and oestrogen mimics are implicated, the medical profession generally regards this trend as perfectly normal.

by Sherrill Sellman, ND © 2004

GetWell International
PO Box 690416
Tulsa, OK 74169-0416, USA
Email: golight@earthlink.net
Website: <http://www.sellman.com>

CHILDREN BECOMING TEENS BEFORE THEIR TIME

Julianne is a devoted mother to her beautiful and healthy-looking five-year-old daughter. But all was not as it seemed: something strange was stirring in Sarah's body. One night, while putting Sarah to bed, Julianne pulled her pyjama top over her daughter's head when Sarah suddenly exclaimed, "Ouch! That hurt when you touched my nipple." Julianne was totally surprised by her daughter's response. Upon taking a closer look, she noticed that her nipples did appear to be different from what she had remembered. In fact, they looked bigger.

Julianne immediately called her paediatrician to schedule tests. The results confirmed that Sarah was going through puberty. The small lumps were, in fact, breast buds. Sarah's breasts were actually developing. But she was only five years old! How could this possibly be?

The doctor explained that Sarah had a condition called "precocious puberty".

Julianne sat there in shock as the specialist informed her that the medical community now considers eight years of age to be the normal age for the beginning of puberty!

"While I always believed that little girls go through puberty at around eleven, twelve or thirteen years of age, something very strange was now happening to our daughters. I was now being told that little girls are considered 'normal' if they start menstruating at the delicate age of eight!"

But there is certainly nothing normal about an eight-year-old hormonally fast-forwarding into puberty.

THINKING THE UNTHINKABLE

It's hard enough trying to keep little girls as little girls these days. The teeny-bopper fascination with such sex symbols as Britney Spears has little girls trying to act much older than they are. If bearing the belly button in sexy midriff tops isn't enough to cause great consternation to parents, then the growing phenomenon of budding breasts and pubic hair certainly does. Discovering that their little girl has breast buds or pubic hair is a tragic shock to parents.

Early sexual development—precocious puberty—seems to be happening everywhere. It's a common sight these days to see nine- and ten-year-old girls with developing breasts playing in the school playground. Something is seriously amiss.

Presently, one girl out of six eight-year-olds in the USA, Australia and Britain is racing into puberty. In fact, it is a pattern emerging in young girls all over the world. Reports of early puberty have come from many diverse countries and climates including Canada, Europe, Asia and the Caribbean. This compares with one in 100 a generation ago.

Precocious puberty is a phenomenon not only occurring in girls; boys are also experiencing their version of precocious puberty. Research published in the journal *Archives of Pediatric and Adolescent Medicine* found that American boys appear to be beginning puberty earlier than in past decades. A significant number of boys as young as eight had signs of genital development some three years earlier than previous estimates.¹ In the UK, it is estimated that one in 14 eight-year-old British boys had pubic hair, in contrast to one in 150 boys of the previous generation.²

The onset of menstruation has been steadily getting earlier and earlier in Western countries. It wasn't very long ago when a teenage girl's first menstruation would arrive between the ages of fourteen and sixteen. Today, the average age of the first menstruation is under twelve years of age. For many girls, however, it is happening much earlier. In

Britain, 50 per cent of ten-year-old girls are now menstruating.

A groundbreaking study in 1997 of 17,000 girls sent shock waves through the medical community. The study found that the initial signs of puberty were occurring earlier than previously recorded. The study found that 27 per cent of African-American and almost seven per cent of Caucasian girls had the onset of secondary sexual characteristics, i.e., either breast development or pubic hair development by age seven. By the time girls turn eight years old, one in seven white girls and one out of two Afro-American girls will be starting puberty! Even more startling was the finding that one per cent of Caucasian and three per cent of African-American girls show these characteristic by three years of age!³

How common is this trend? "Young girls in the five- to ten-year-old range with breasts and pubic hair—we encounter this every day in our clinic," says Michael Feemark, chief of paediatric endocrinology at Duke University Medical Center in the USA.⁴ Similar findings were also reported from a study of 14,000 children from Bristol University's Institute of Child Health in the UK.⁵

The development of secondary sexual characteristics in girls is a significant event, signalling the onset of physiological and psychological changes of profound importance. Many scientists and doctors are very concerned. This is not only a worrying trend but a very serious public health problem. Before they have outgrown doll's houses, many young girls are being faced with the confusing mood swings, hormonal changes and sexual attention that accompany physical maturation.

The ramifications for public health are dramatic. Studies have found that girls who reach puberty earlier tend to have sex earlier, have an increased risk of pregnancy, experience more psychological stress, poor mental health, more behavioural problems, and are more likely to drink, smoke, have a lower IQ and commit suicide. For boys, it can mean more aggressive, violent behaviour, learning disabilities and more drug and alcohol abuse.

But the most disturbing consequence of early puberty in females is the well-established risk for pre- and post-menopausal breast cancer as well as ovarian cancer. According to a study published in *Nature* (1989), the risk associated with having an early menstruation—for instance, one that takes place at the age of ten—is approximately twice that associated with a menstruation occurring at the age of sixteen.⁶ In addition, girls showing early signs of puberty have increased risks of polycystic ovarian syndrome, menstrual irregularities, acne, excessive facial hair and infertility.

Early puberty in males can increase their incidence of testicular cancer, lower fertility and impaired growth leading to shorter stature. A researcher into precocious puberty, Dr Marcia Herman-Giddens, adjunct professor of maternal and child health at the University of North Carolina, said, "It's probably not healthy, since earlier studies have shown that the sooner a boy starts puberty, the higher his risk is of developing testicular cancer, just as early-maturing girls are at greater risk of developing breast cancer".⁷

THE SILENT INVASION

Since early puberty is a well-established risk for breast cancer, the earlier a woman reaches puberty, the longer her breast tissues will be exposed to potentially harmful agents (chemicals, radiation and oestrogen).⁸ Even though a girl may begin menstruating, it is unusual for her to be ovulating every month. Since ovulation is necessary for the production of progesterone, early puberty is often a condition that results in oestrogen production without the protective effects of progesterone. This hormonal imbalance adds to a girl's body-burden of oestrogen excess, putting her at increased risk of oestrogen-dependent cancers and other hormonal problems.

It has been known for some time that the younger a woman is when she starts her periods, the higher her risk of developing breast cancer later in life. The younger a woman is, the longer her overall exposure to high levels of oestrogens.

Dr Carlos Sonnenschein of the Tufts University School of Medicine warns that "...the length and amount of exposure to oestrogen is one of the most significant risk factors in breast carcinogenesis. Unless you are exposed to oestrogens, you don't get breast cancer. The longer the exposure is, the higher the incidence. Therefore, if you decrease the age of the first menstruation, you are at higher risk".⁹

The experts are confused. It is absurd to think that early puberty is the result of better nutrition, as many scientists assert. One connection is that it seems to be linked with obesity. An increase in obesity in children and lack of exercise has a direct relationship to this problem. Since the 1960s, the number of overweight kids and adolescents in the United States has nearly doubled. Today, 10 per cent of two-to five-year-olds and more than 15 per cent of children between the ages of six and nineteen are overweight.¹⁰ Childhood obesity is also a major public health concern throughout the world including in Australia, New Zealand, the UK, Ireland, Germany, Italy and Canada.¹¹

One explanation looks at a protein called leptin that encourages early breast development. Leptin is produced from fat cells and is necessary for the progression of puberty. So, the more fat cells, the more leptin is produced by the body. In addition, overweight girls have more insulin circulating in their blood. High levels of insulin stimulate the production of sex hormones such as oestrogen, adding to an oestrogen excess.

Is it just the fast foods and sedentary lifestyle that are piling up the leptin-producing fat? Perhaps not.

A 20-year study found that the greater the prenatal level of the hormone disruptor polychlorinated biphenyl (PCBs), the heavier the girls were at age fourteen and their puberty was statistically earlier.¹²

Could prenatal exposure to hormone disruptors play a role in obesity? A study based on this idea was conducted by Dr Walter Rogan, an epidemiologist at the National Institute of Environmental Health Sciences. He chose 600 pregnant women and measured the levels of chemicals in their bodies; then, when their babies were born, the researchers measured the chemicals in

"Young girls in the five- to ten-year-old range with breasts and pubic hair—we encounter this every day in our clinic."

the mothers' breast milk, and finally, the children were monitored as they grew into puberty. What was found was that boys exposed to DDE and girls exposed to PCBs were heavier than their unexposed peers were. The study also found that girls with high prenatal PCB exposure tended to hit the first stages of puberty a bit earlier.¹³

In fact, the most significant guilty party is looking more and more like endocrine disruptors. Circulating around the world are thousands of these endocrine-disrupting chemicals which are now found everywhere—in our food, water and the air we breathe.

Events occurring in Puerto Rico have helped unravel this puzzling trend. For the past two decades, Puerto Rico has recorded the highest known incidence of premature breast development. It was discovered that girls as young as *two* years of age were developing breasts. Several reasons have been cited for this situation. First of all, most of these children were fed soy infant formulas. A 1997 *Lancet* study showed that soy has plant-based chemicals that mimic oestrogen, displaying a wide range of hormonal activities. The daily exposure in infants who consumed soy formulas was 6 to 11 times higher than in adults who consumed soy foods. In fact, the blood concentrations of these hormones in the children were 13,000 to 22,000 times higher than oestrogen levels normally found in the blood!¹⁴

Clues have also emerged, implicating endocrine disruptors. In a significant study, the early breast development of the Puerto Rican children was linked to exposure to phthalates, a ubiquitous chemical plasticiser. The researchers measured the presence of certain phthalates in the blood of 41 girls experiencing early breast development and made comparisons with a control group. The average age was 31 months. They found that 68 per cent of the precocious puberty girls had high levels of phthalates in their blood.¹⁵

Phthalates have infiltrated our world. They are in common industrial chemicals that make plastics flexible without sacrificing strength or durability. They are found in building materials, food packaging and food wrap, toys and other children's products, medical devices, garden hoses, shoe soles, automobile undercoating, wires and cables, carpet backing, carpet tiles, vinyl tiles, swimming pool liners, artificial leather, canvas tarpaulins, notebook covers, tool handles, dishwasher baskets, flea collars, insect repellents, skin emollients, hairsprays, nail polish and perfumes.

John Peterson "Pete" Myers, co-author of *Our Stolen Future*, agrees. "Contamination in the womb can speed or retard sexual development," Myers said. "These compounds interfere with hormones that control the pace and pattern of development."¹⁶

Chemicals that are suspected of having effects on sexual development include bisphenol-A and polybrominated biphenyls, chemicals found in plastic, and phthalates, which are found in cosmetics.¹⁷

Hormone disruptors, like silent saboteurs, have invaded the highly sensitive endocrine systems of our children. Whether from toxins in the environment, or hormone-laden meat and dairy products or chemical-laced foods and household products, exposure to dangerous chemicals has reached a level unprecedented in the entire history of human civilisation. Is there any wonder why precocious puberty is a worldwide phenomenon?

The fact that early puberty is a known risk factor for breast cancer should be of great concern to all parents, and all possible precautions must be taken to safeguard children from unnecessary exposure. No one really knows the long-term consequences of early sexual development. This is an unprecedented experiment on our children.

Hardly a minute goes by without our being exposed to some chemical. It may be from car exhaust, room freshener, artificial fragrances, a McDonald's hamburger and Coke, baby shampoo, dry cleaning, coloured popcorn, furniture polish, the fire retardant on new school clothes, plastic water bottles, dry cleaning, fly spray, and on and on it goes. Beginning *in utero*, our children are accumulating chemicals in their bodies little by little, day in and day out, for years and years. For some children, the effects may become evident quickly; for others, it may take many years or decades before the real harm—the cancers, the multiple sensitivities, the behavioural problems, the learning disabilities and the infertility—becomes apparent.

HORMONES IN THE FOOD SUPPLY

Commercial beef and pasteurised dairy products consistently have the highest levels of persistent hormone disruptors. As of 1995, the US Food and Drug Administration allowed the use of implanted hormonal agents for raising beef cattle. These include the female hormones oestradiol and progesterone, the synthetic progesterone norgestomet, the male hormone testosterone and the synthetic anabolic steroids trenbolone and Zeranol. Growth agents that do not have to be implanted include a progestin that can be added to the animals' feed. Animals given these hormonal agents are not required to go through a withdrawal period prior to slaughter. Indeed, the FDA does not require mandatory recording of medication or treatment of animals

Commercial beef and pasteurised dairy products consistently have the highest levels of persistent hormone disruptors.

destined for our plates.

Three natural hormones (oestradiol-17 β , testosterone and progesterone) and two synthetic substances (trenbolone and Zeranol) are also approved for use in many other countries, including Australia, Canada and New Zealand.

Hormones in beef have serious oestrogenic and carcinogenic effects—effects which the cancer establishment, the FDA and the cattle industry have been well aware of for decades. Yet the real dangers they pose, especially when it comes to women and breast cancer, have remained in the shadows until only recently.¹⁸ (Non-organic meats like pork, veal, lamb and poultry, although uncontaminated by sex hormones, contain pesticides and a wide range of veterinary drugs.)

Not surprisingly, a random survey in 1986 found that up to half of all cattle sampled in feedlots in Kansas, Colorado, Texas, Nebraska and Oklahoma had hormone pellets illegally implanted in muscle tissue rather than under the ear. This practice led to higher absorption of hormones from the implants and very much higher residues that even the FDA admitted could have "adverse effects".¹⁹

According to Dr Samuel Epstein, Professor of Occupational and Environmental Medicine at the University of Illinois School of Public Health: "Records of hormone levels in beef, obtained under the Federal Freedom of Information Act from the FDA, show that even when ranchers implant single hormone pellets

beneath the ear skin under ideal laboratory conditions, levels of oestradiol and other hormones in meat and organs are more than triple the levels found in non-implanted controls. Much higher levels, up to three-hundred-fold, result from the common practice of illegal intramuscular implants...²⁰

Cattle today are receiving a lot more hormones than ever before. In 1990, the FDA ruled in favour of doubling the dose of hormones allowed in cattle. As a result of this new ruling, some feedlots now put implants in each ear for more bulk at a faster rate. This is because feedlots are paid by weight for their product.²¹

The FDA's reports in hormonal implants give us cause to worry. In 1983, the FDA found that Synovex-S, a product containing oestradiol and progesterin, increased oestradiol concentrations in cattle muscle by twelvefold, in liver by sixfold, in kidneys by ninefold and in fat by twenty-three-fold. When cattle are slaughtered following implantation, levels are even higher. With multiple implants, they are higher still; with intramuscular implants, yet even higher. Some hormones are fed to cattle in feedlots.²²

The extent to which hormonal meat contributes to increased rates of breast cancer, apart from cancer of the uterus, prostate and testes, has been virtually ignored. Hormonal beef may also have another endocrine-disruptive side effect: early puberty.

It comes as no surprise that the European Union has banned the importation of hormone-treated US beef. Americans, unfortunately, are getting a pharmacopoeia of steroid drugs every time they chow down a hamburger or hot dog. For children, eating hormone-laced meat on a regular basis seriously increases their oestrogen exposure.

It should be obvious by now that organically raised meat is the only safe meat to eat. Free of chemicals, sprayed feed, antibiotics and hormone-injected growth stimulators, *organic, grass-fed* beef is by far healthier and more nutritious than the commercial kind.

What about poultry and fish? With the use of growth promoters and antibiotics in the poultry industry, *organic* chickens and turkeys are, without doubt, the safer option.

Fish has always been considered a healthy alternative to meat. Unfortunately, it is getting harder and harder to find clean fish, either freshwater or ocean. Freshwater fish appear to be among the most heavily contaminated of foods. Top predator fish, like

pike and walleye, are likely to be contaminated with heavy metals like mercury—a hormone disruptor. Farmed salmon are raised on various drugs, chemicals and hormones, and shellfish often concentrate cadmium—another endocrine-disrupting heavy metal. (Diets high in adequate calcium, protein, iron and zinc help protect against cadmium absorption). The very best fish to eat are deep-sea fish such as halibut, non-farm salmon, sardines, cod and mackerel.

Free of chemicals, sprayed feed, antibiotics and hormone-injected growth stimulators, *organic, grass-fed* beef is by far healthier and more nutritious than the commercial (grain-fed) kind.

WHAT CAN BE DONE

With the red flags waving, you would think that the medical profession would be leading the charge against contamination and exposure to hormone-disrupting chemicals. After all, they are in the trenches, daily witnessing the rising number of children with precocious puberty. Surely they should be the ones jumping up and down and yelling and screaming the loudest for something to be done.

It is therefore rather shocking that a report by a nationwide network of physicians headquartered in California suggested that it is perfectly normal for Caucasian girls as young as seven and black girls as young as six to start developing breasts!²³ Perfectly normal?

Instead of facing up to the implications of what is contributing to this aberration and leading the charge for immediate investigation into the causes and solutions, the medical community prefers to ignore a looming tragedy. They have redefined what is considered normal to reflect current trends.

By claiming that nothing is wrong, no fingers are pointed, no accusations are laid and no one is held accountable. Industries and corporations can merrily continue going about their business of contaminating and polluting.

Presently, the only treatment for precocious puberty available from traditional medical doctors is the dangerous drug, Lupron. According to the *Physicians' Desk Reference*, Lupron has 265 possible risks and side-effects, including cancer. Lupron can cause severe problems such as tremors, seizures and memory loss.

The FDA has received a wide range of reports of serious side-effects, including death, suspected to be associated with the use of Lupron.

However, the agency asserts that the drug's benefits outweigh the risks, and does not believe there is sufficient proof to blame Lupron. (For more information, visit the National Lupron Victims Network at the website <http://www.lupronvictims.com/>.)

RECOVERING POLITICIAN



There are ways to help children either slow the development of precocious puberty or even possibly reverse this condition.

Holistic healing modalities such as traditional Chinese medicine (TCM), naturopathy, homoeopathy, chiropractic and other holistic medical approaches have been able to help children get their hormonal health back on track, thus reducing some of the physiological dysfunctions contributing to early development.

In addition to having a high body-burden of endocrine-disrupting chemicals, children with precocious puberty tend to have compromised digestive systems, candida from overuse of antibiotics, food allergies, nutritional deficiencies, over-burdened livers and heavy metal toxicity.

The earlier this problem is identified, the greater the success of reversing the signs of puberty. Unfortunately, orthodox medicine has no answers nor solutions and can only address the problem by prescribing powerful, toxic drugs that turn off the endocrine system.

In addition, all external sources of hormones and hormone-mimicking chemicals should be avoided. These include non-organic meat, pasteurised dairy products, sugar and refined carbohydrates, junk food, agricultural and industrial chemicals, and all commercial household cleaning products and personal care products (suntan lotion, shampoos, bubble baths, moisturisers, etc.). Our bodies, our homes, our gardens and our schools should be made chemical-free zones.

Precocious puberty is a perilous experiment of 21st-century living, making children teens before their time. However, with vigilance, education and the commitment to making healthy changes, our children's endocrine well-being and their future health can be ensured.

GUIDELINES FOR REDUCING EXPOSURE TO OESTROGEN DISRUPTORS

1. Eliminate any pesticide, herbicide and insecticide use on lawns and gardens. Even some commercial composts may be contaminated with chemicals. Effective organic products are available, or learn to make your own pest control formulas. Make your own organic compost.

2. Lobby in your community to stop the spraying of hormone-disrupting chemicals in and around schools and city properties.

3. Make as much of your diet organic as possible. This will eliminate the toxic, hormone-disrupting chemicals that are sprayed on fruits and vegetables. Also, buy organic meat, poultry, dairy foods and butter that are free of steroid hormones and antibiotics. Organic foods have been found to contain higher amounts of vitamins and minerals.²⁴ Be aware that the following commercially grown fruits and vegetables have been found by the Environmental Working Group to contain the highest levels of pesticide contamination: spinach, strawberries, apricots, cantaloupe, green beans, peaches, bell peppers, celery, cucumbers, cherries and grapes.

Glutamine-rich foods help the liver remove environmental waste and give protection against pollution: broccoli, cauliflower and other cruciferous vegetables, asparagus, spinach, watermelon,

pears, squash and potatoes. Allylsulphide-containing foods like garlic, shallots, onions and chives stimulate glutathione production. Miso, fermented soybean paste and seaweed remove pollution and radiation from the body.

4. Thoroughly wash non-organic fruits and vegetables with either a fruit and vegetable wash available at health food stores, or soak them in an apple cider vinegar and water bath.

A Clorox bath is most effective and inexpensive for removing bacteria, parasites, pesticides and other contaminants from food. Add a teaspoon of Clorox to one gallon (3.785 litres) of water. Soak leafy vegetables and thin-skinned fruit (berries, plums, peaches, etc.) for 15 minutes; root, thick-skinned or fibrous vegetables and thick-skinned fruits (oranges, bananas, apples) and poultry, fish and eggs for 20 minutes.

Frozen meats (not ground meat) can be thawed in a Clorox bath for about 20 minutes for up to five pounds (2.267 kilograms) of frozen meat. Remove the foods from the Clorox bath, place them in clear water for 10 minutes, and rinse. Dry all foods thoroughly and store. Warning: use only Clorox, and no other brand of bleach, since it does not contain any chlorine.

5. Use organic personal care products. Most deodorants, shampoos, sunscreens, skin care, body care and baby products contain carcinogenic or toxic chemicals. According to a US General Accounting Office Report: "Cosmetics are being marketed in the United States which may pose a serious hazard to the public. Over 2,983 chemicals used in cosmetics...and one-third (884) of these ingredients have been reported as toxic substances..."

6. Don't let children chew on soft plastic toys. Phthalates are added to soften PVC plastic toys. These plastic toys also retain any pesticides sprayed in the house for up to two weeks. Buy

unfinished wood or natural fibre toys.

7. Avoid lice and scabies shampoos containing lindane and synthetic pyrethroid. Lindane has been shown to promote tumour growth the same way oestrogen did.

8. Teach your children to wash their hands frequently and not to lick their fingers or bite their nails. Since chemicals inevitably get deposited on surfaces, frequent cleaning with organic cleaning products is a safe, preventive measure.

9. Whenever possible, avoid buying canned foods or foods wrapped in plastic. Make sure you remove foods from packaging as soon as possible. Use glassware for oven cooking. (Note that using microwave ovens is not advised; however, if you must use one, make sure you use only glass cookware.)

10. Carefully read the labels of foods, personal care products, household cleaners, cosmetics, lawn and garden supplies and pet supplies. Become familiar with the dangerous chemicals found in such products and be willing to buy other, safe brands.

11. Install a water filter. Pesticides, other chemicals, rotting leaves and other debris combine in drinking water. Heavy metals from household pipes and plumbing can be an added concern.

Unfortunately, orthodox medicine has no answers nor solutions and can only address the problem by prescribing powerful, toxic drugs that turn off the endocrine system.

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SCHIZOPHRENIA

THE ADRENOCHROME HYPOTHESIS

The triggers that increase the negative impacts of genetic aberrations linked to schizophrenia have become increasingly more common in the industrialised world, yet most sufferers of this illness can be helped with an eight-step program.

by Harold D. Foster, PhD © 2003

Professor, Department of Geography
University of Victoria
PO Box 3050
Victoria, BC, V8W 3P5, Canada
Email: hfoster@mail.geog.uvic.ca
Website: <http://www.hdfoster.com>

*But strange that I was not told
That the brain can hold
In a tiny ivory cell
God's heaven and hell.*

— Oscar Wilde (1854–1900)

THE WRONG ANSWER

Pope John Paul II wrote in a letter in 2002 that "It may be said that a society shows itself just to the extent that it meets the needs of all its members, and the quality of its civilisation is determined by the way in which it protects its weakest members".¹ If this is the case, then we should be judged harshly. In most "civilised" societies the mentally ill, mainly consisting of schizophrenics, are homeless, sleep in parks, under bridges or in dumpsters, beg muttering in the streets, or, because of their irrational crimes, fill our prisons.

Schizophrenia may be the cruellest disorder, afflicting "...young adults, often beginning insidiously and progressing until the ambitions, potentials, and hopes of early years are disregarded in disarray. In their place lie broken thoughts, inappropriate or stunted emotions, and internal voices or other misperceptions that can make existence a living hell."² Unfortunately, it is not rare.

Schizophrenia is the commonest serious mental illness of the developed world. In the USA, it accounts for some 24 per cent of all admissions to mental hospitals.³ Initially, the disease is often episodic with acute phases interspaced with remissions, but it often becomes chronic.

In his extremely interesting book, *The Madness of Adam and Eve*, Horrobin⁴ makes this point:

While in familial and personality terms the problem is devastating, in biochemical terms the problem cannot be very serious. After all, the young person functioned near normally for fifteen, twenty-five or thirty-five years before becoming ill. Moreover, all schizophrenic patients vary in the severity of their illness, often, as documented earlier, becoming near normal while the body temperature is elevated. The fundamental biochemical problem, therefore, cannot be too serious and must be reversible.

This is an extremely intelligent and encouraging characterisation. It seems fair to ask, however, if the problem is so biochemically simple, why have countless thousands of doctors and scientists spent billions of dollars over more than 200 years in endless, unsuccessful attempts to discover the aetiology of schizophrenia?

The logical answer to this question must be that they are trying to hammer jigsaw puzzle pieces into spaces where they do not fit. Conventional drug treatment rests, to a large degree, on the "dopamine hypothesis"; that is, on the belief that excess dopamine accentuates and decreased dopamine reduces the positive or hot symptoms of schizophrenia.⁵

The evidence for high levels of dopamine in schizophrenia sufferers is poor,⁶ and Parkinsonism (the mimicking of Parkinson's disease) has occurred frequently in patients treated for this hypothesised excess. Since Parkinson's disease is known to stem from a dopamine deficiency, it seems likely that drugs causing a similar illness in schizophrenics are creating a lack of this neurotransmitter rather than correcting an excess of it.

GENETIC PREDISPOSITION

If too much dopamine is not the root cause of schizophrenia, then what is? Certainly, genetics must play a significant role because 50 per cent of patients with this illness come from families with a history of the disorder.⁷ This preponderance cannot be explained by abnormal child-rearing, since adoption has no impact on the risk of subsequently becoming schizophrenic.

There is beyond a doubt, therefore, a strong genetic component to schizophrenia, but it cannot be as straightforward as the inheritance of certain characteristics such as eye colour, since, as Myers⁸ points out, "about half of the twins who share identical genes with a schizophrenic victim do *not* develop the disorder". One must agree with Nicol and Gottesman's⁹ assessment that some individuals "have a genetic predisposition to the disorder but that this predisposition by itself is not sufficient for the development of schizophrenia." The schizophrenia genes, therefore, are not destiny but do enhance risk.

For many years, geneticists have been studying groups of schizophrenics or individual families in which the disorder is unusually common, in efforts to discover what, if any, genetic abnormalities they carry. To date, four genetic aberrations have been identified¹⁰⁻¹³ that seem to occur more frequently than normal in subgroups of schizophrenics. These include the low enzyme activity variant of the catechol-O-methyltransferase gene, the GSTM1*O allele (required to produce a form of glutathione S-transferase) and possibly the C677TT variant of the gene for methylenetetrahydrofolate reductase. Beyond this, many schizophrenics appear to have inherited an unusual Nogo (reticulon 4, RTN4 or RTN-X) variant gene from both parents.

What these four genetic aberrations seem to have in common is that they all result in higher-than-normal exposure to adrenochrome, a metabolite of adrenaline, or in an abnormal susceptibility to its negative impacts. Since all of these variants are quite widely distributed in the human populace, it seems likely that abnormal levels of adrenochrome carry evolutionary advantages.

In several publications, including *What Really Causes Schizophrenia*,¹⁴⁻¹⁶ I have argued that there appear to be not one but at least three and maybe four balanced genetic morphisms involved in this mental illness. The genetic aberrations increasing the risk of schizophrenia appear to promote religious sense, technical and artistic creativity, and leadership.¹⁷ They also seem to provide a greater resistance to a wide range of cancers, especially that of the lung.¹⁸ While they may be extremely destructive in individuals prone to develop schizophrenia, such genes are highly beneficial for humanity as a whole.

THE NATURE OF ADRENOCHROME

In the early 1950s, Osmond and Smythies¹⁹ realised that pink (that is, deteriorated) adrenaline sprays were making some asthmatic psychotic, causing them to hallucinate.

Hoffer²⁰ knew that similar side effects accompanied the use of mescaline and made a list of all identified compounds that caused hallucinations in those who were awake. The list is short. It includes harmline, mescaline, ibogaine, d-lysergic acid diethylamide (d-LSD-25) and deteriorated adrenaline. Hoffer was delighted to realise that all were indoles (harmline, ibogaine, LSD) or could become indoles (mescaline). However, it was not

known what pink adrenaline was until 1952, when Hutcheon²¹ described how the oxidation of adrenaline created the indole adrenochrome. Hoffer then experimented by taking this substance himself, finding it made him paranoid.

In another trial, Osmond²² was administered 300 mg of spray containing adrenochrome. Within 11 minutes, his ears felt plugged and his vision became abnormal. Rapidly swinging one arm backward and forward caused him to see this as a series of stationary arms. Within an hour, he decided to cycle home from the hospital and noticed that the roadside trees were expanding as if being pumped up with air. Clearly, he was hallucinating. Arriving home earlier than usual, he found his wife was out and he became very depressed, deciding that she must have left him and returned to her mother in a distant city. He counted all the suitcases. One was missing, increasing his certainty that she had gone. Finding a pile of clothes, he concluded that his wife had been packing to leave and had decided to go out to purchase her airline ticket. His depression increased. Remembering the experiment, he became very angry with the person who had forced him to take adrenochrome. (He had, in fact, been a very willing participant in the experiment.) Clearly, he was becoming paranoid.

This experimental evidence suggests that intelligent, highly educated individuals can be made to display many of the symptoms of acute schizophrenia very quickly, simply by exposing them to excess adrenochrome.

Put very simply, some people appear to become schizophrenic because their bodies manufacture an indole, adrenochrome, that has effects rather like the well-known psychedelic drug, LSD.

HISTORY OF SCHIZOPHRENIA

In a recently published book, *The Invisible Plague: The Rise of Mental Illness from 1750 to the Present*,

Torrey and Miller²³ argue that, throughout human history, the baseline rate of insanity was approximately one case for each 2,000 members of society. Using a great diversity of records, ranging from mental health surveys to psychiatrists' diaries, they are able to prove beyond reasonable doubt that industrialisation has been accompanied by dramatic increases in mental illness. In England, Ireland, Canada and the USA, for example, "the prevalence of insanity, as a rate per population, increased at least sevenfold between the mid-18th and mid-20th centuries". In the USA and especially in Ireland, the increase was greater.

Torrey and Miller argue that "We are now in the midst of an epidemic of insanity so insidious that most people are even unaware of its existence". The invisible plague appears worst in Ireland, where the number of insane persons per 1,000 population has reached almost 8.0. This seems to be about 16 times the pre-industrial global baseline.

One does not have epidemics of genetic diseases, simply because the human genome does not alter rapidly enough to cause them. The current epidemic of insanity, associated with both schizophrenia and bipolar disorder, that has developed over the past 250 years is a very strong argument that the triggers that increase the negative impacts of the genetic aberrations linked to this mental illness have become more common. These appear to include anything that either stimulates the body's production of adrenaline or promotes its metabolism to adrenochrome and its derivatives.

"We are now in the midst of an epidemic of insanity so insidious that most people are even unaware of its existence."

PULLING THE TRIGGER

• Stress

Stress is the easiest way to promote the metabolism of adrenaline in the human body. Although medical interest in stress can be traced back to Hippocrates,²⁴ it was not until the 1920s that physiologist Walter Cannon²⁵ confirmed that response to stress is part of a unified mind-body system. Cannon was able to show that various stressors, including extreme cold, lack of oxygen and emotion-arousing incidents, trigger an outpouring of epinephrine (adrenaline) and norepinephrine (noradrenaline). These enter the bloodstream from sympathetic nerve endings in the inner adrenal glands.²⁶ In those stressed, the sympathetic nervous system increases respiration and heart rate, diverts blood to skeletal muscles and releases fat from storage. All these changes prepare the body for what Cannon called "fight or flight" and are obviously part of a response system that has evolved in an effort to deal with perceived threats.

Unfortunately, in situations of chronic stress, the "fight or flight" response becomes counterproductive, leading to a cumulative build-up of adrenaline, noradrenaline and cortisol. If these substances are not properly metabolised, long-term stress appears to promote disorders ranging from headaches and high blood pressure to rheumatoid arthritis and allergies.²⁷ What is significant here is that the "fight or flight" response to stress is associated with an elevation of adrenaline, oxidation of which can lead to an excess of adrenochrome. It is perhaps not surprising, then, that chronic stress is often linked to anxiety, poor concentration, depression, anger, frustration, fear and sadness.²⁸

Of course, if the individual being stressed carries one of the genetic aberrations linked to schizophrenia, adrenochrome levels are likely to be higher than normal and may be linked to the paranoia and hallucinations that this indole causes when taken accidentally or experimentally.²⁹

In summary, stress may be a trigger for schizophrenia because it increases the production of the precursors of adrenochrome.

• Allergies

Physicians at the Moscow Psychiatric Institute used long fasts to treat schizophrenia, greatly improving the symptoms of 64 per cent of all chronic patients who completed their program.³⁰ This strongly suggests that there may be dietary triggers for the disorder. Further support for this possibility comes from the recognition that such fasting normalises catecholamine levels in the urine of schizophrenics.³¹

Countries where the national diet traditionally contains large quantities of cow's milk and wheat have poor recovery rates for schizophrenics.³² This is to be expected, as some schizophrenics greatly improve on gluten-free diets,³³ perhaps because coeliac disease is common in their families.³⁴ Indeed, Pfeiffer claimed that 10 per cent of schizophrenics suffer from a gluten allergy.³⁵

Hoffer also discovered that, in some fasting schizophrenics, the reintroduction of cow's milk caused hallucinations.³⁶ Indeed, 120 of Hoffer's "problem patients"—those who had not responded well

to orthomolecular treatment—experienced significant permanent improvements in their mental health after identifying and eliminating from their diets specific foods to which they were allergic.³⁷

These clues to the aetiology of schizophrenia suggest that diet often plays a key role in triggering the disorder. This may be one of the reasons why so many recovered schizophrenics believe they were formerly hypoglycaemic and that they had greatly improved only after a major dietary change. How can so many different foods trigger one disease? The best way to understand a disorder is often to examine extreme cases. A few people are

exceedingly allergic to a particular food, such as peanuts or salmon, or to a product such as latex, and can die rapidly if exposed to even small quantities of it.³⁸⁻³⁹ Allergic reactions can include skin rashes, itching, hives, burning eyes, swollen lips and tongue, difficulty breathing, wheezing, dizziness, abdominal pain, nausea and diarrhoea. In rarer cases, a strongly allergic individual suffers shock; blood pressure drops markedly, the throat swells and airways in the lungs constrict. Without immediate treatment with epinephrine, death from anaphylactic shock occurs.

Interestingly, the treatment of choice for anaphylaxis, whether caused by latex,⁴⁰ peanuts, or insect stings,⁴¹ is always epinephrine, a dilute solution of adrenaline. This is because, during an allergic reaction, the chronic inflammatory response is usually characterised by numerous polymorphonuclear leukocytes,⁴² the presence of which has been shown by Matthews and co-workers⁴³ to be linked to the oxidation of adrenaline to adrenochrome. In such an allergic reaction, oxidation of adrenaline to adrenochrome is detectable within five

minutes and continues for at least four hours.

Of course, many people are allergic to substances that occur in water supplies or as air pollutants or as an integral part of products of one type or another.⁴⁴ This may be one of the reasons why schizophrenia's prevalence has markedly increased during the Industrial Revolution. Industrialisation has brought with it an enormous range of pollutants that have adversely affected air, water and soil quality. By 1977, the American Chemical Society had registered some four million chemical compounds, 32,000 of which were in commercial use.⁴⁵ It is unknown how many of these are potentially dangerous, although there are currently some 2,450 substances that are thought to cause cancer in the workplace. While attempts are generally made to establish the possible carcinogenicity of such industrial chemicals, their potential effects on mental health rarely appear to be considered.

• Hypoglycaemia

Hypoglycaemia was initially described by Dr Seale Harris⁴⁶ in 1924 when he discovered that sugar consumption stimulated the body to release insulin which, in turn, drove blood sugar levels down. Harris discovered that a high-protein, low-sugar diet—eaten at frequent, small meals—maintained a normal and stable blood sugar level, so controlling hypoglycaemia.

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Since sugar consumption per capita in the United States has increased by roughly a factor of 20 since 1822,⁴⁷ hypoglycaemia has become rampant in its population.⁴⁸ As mentioned above, many recovered schizophrenics feel they had previously suffered from hypoglycaemia. Schauss⁴⁹ estimated that between 80 and 85 per cent of criminals in US prisons suffer from hypoglycaemia, often eating an excess of sugary foods and repeatedly drinking sugar-sweetened coffee and/or Kool-Aid.

It is well known that when blood sugar levels drop, adrenaline is released from the adrenal glands because it is involved in the metabolism of glucose.⁵⁰⁻⁵¹ It follows, therefore, that anyone suffering from the large blood-sugar swings characteristic of hypoglycaemia (associated with a diet that is too rich in sugar) is going to overproduce adrenaline. Hypoglycaemic individuals with one or more of the genetic aberrations seen in schizophrenia are therefore likely to suffer psychosis caused by adrenochrome created by the oxidation of this excess adrenaline.

BIOCHEMICAL AND CLINICAL IMPACTS OF ADRENOCROME

Besides being an hallucinogen, adrenochrome is a highly reactive neurotoxin that, in schizophrenia, undermines at least three major biochemical systems.⁵² It is an antagonist of the hormone triiodothyronine and can and often does seriously damage the thyroid. In chronic schizophrenics, this gland impairment appears to be permanent. Adrenochrome also has a Jekyll and Hyde relationship with serotonin and so impacts on tryptophan and its other chief metabolite, niacin. At low levels, serotonin appears to stimulate adrenochrome formation, while at higher levels it retards the process.

Adrenochrome also generates numerous free radicals, causing oxidative stress, eventually exhausting the schizophrenic antioxidant defence systems, creating deficiencies of glutathione peroxidase, superoxide dismutase and catalase. Complicating the

impacts of high adrenochrome conversion from adrenaline are the numerous interactions that normally occur between triiodothyronine, serotonin and the three major components of the antioxidant defence system. In chronic schizophrenics who have suffered for years, these biochemical abnormalities result in brain atrophy, associated with large fluid-filled spaces known as ventricles, and serious damage to the thyroid gland.

TREATMENT AND PREVENTION: EIGHT STEPS

If the adrenochrome hypothesis is correct, the "ideal" treatment for schizophrenia should involve eight steps, designed to reduce the production of adrenaline and slow down its metabolism to adrenochrome and other toxic indoles. Such a treatment should also attempt to reduce the further biochemical abnormalities that result from either an excess of adrenochrome and its metabolites or other impacts of the four genetic aberrations that appear associated with this mental illness.

Since many schizophrenics are overoxidising adrenaline due to allergic reactions, they need *extra-special surroundings* because of such sensitivities. Ideally, a treatment clinic would be like the Lange Meridian Centre, which was built using *Bau-biologie* principles.⁵³ Step two involves *genetic and biochemical*

screening to identify the most likely effective treatment protocol. *Allergy testing* is also essential, as is a *low-sugar diet*.⁵⁴ The fifth step in the treatment of schizophrenia should involve *medications that must quickly reduce the destructive impacts of excess adrenochrome and its derivatives*. They must also *address the other biochemical anomalies directly related not to such indoles, but to the genetic aberration encouraging their overproduction*. In schizophrenics with the MTHFR C677TT variant, for example, the patient will also be suffering from depressed methionine and elevated homocysteine levels.

Since many schizophrenics are overoxidising adrenaline due to allergic reactions, they need extra-special surroundings because of such sensitivities.

Endnotes

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There appear to be several avenues for lowering excess adrenochrome levels.⁵⁵ These include high doses of niacin or niacinamide and the use of other natural methyl acceptors such as thiamine (vitamin B1), riboflavin (vitamin B2) and ubiquinone (coenzyme Q10). Niacin is usually the treatment of choice.

Another adrenochrome antagonist, triiodothyronine, appears to be very effective in treating schizophrenia. As shown by Danziger,⁵⁶ every one of the 80 schizophrenics who had been ill for six months or less, who took between 120 and 1,200 milligrams of desiccated thyroid daily for at least 100 days, recovered, suffering relapses only if they later discontinued their medication. These doses may seem high, but it should be remembered that schizophrenics are known to be very resistant to thyroid medications. This is probably because all chronic schizophrenics appear to be suffering from badly damaged thyroid glands.

Treatment might also involve attempts to directly raise body levels of another adrenochrome antagonist, serotonin. If serotonin is not provided as a supplement, its metabolism could be encouraged by the consumption of foods that are high in tryptophan, such as beans, cod, pork, soybeans and cheese (provided that the patient is not allergic to them). In addition, every effort should be made to repair the antioxidant defence system, increasing glutathione peroxidase, catalase and superoxide dismutase activity.

Since there appear to be several genetic aberrations involved in schizophrenia, subgroups of patients also will suffer from *distinct biochemical imbalances that need correction*. The sixth step of the treatment protocol should address these. To illustrate, schizophrenics with the MTRR C677T variant of the gene encoding for methylenetetrahydrofolate will suffer from an excess of homocysteine and a deficiency of methionine, even if treatment reduces adrenochrome levels. Beyond the provision of methionine, since

the remethylation (or detoxification) of homocysteine requires folic acid, vitamin B12, zinc and trimethylglycine, it is likely that schizophrenics with this genetic aberration will require high doses of these nutrients.

Adrenochrome excess and the other biochemical abnormalities that occur in schizophrenia can eventually cause serious damage to the thyroid gland⁵⁷ as well as to the brain itself. Long-term chronic patients are therefore much more difficult to treat successfully. This task might not be impossible, but it will almost surely require higher doses of orthomolecular nutrients, taken for longer periods, before improvement is apparent.

As mentioned before, one of the major problems in chronic schizophrenia is the development of brain atrophy. Buckman and co-workers⁵⁸ provided evidence that blood levels of the selenoenzyme glutathione peroxidase have a strong negative correlation with computer tomography scan measures of such brain damage. Simply put, the less blood glutathione peroxidase, the greater the brain damage in chronic schizophrenics. Obviously, one treatment strategy worth trying is supplementation with the four nutrients—selenium, cysteine, glutamine and tryptophan—that

the body requires to produce glutathione peroxidase.⁵⁹ Injected glutathione may be of value. There is also growing evidence that eicosapentaenoic acid can repair ventricle damage in chronic schizophrenics, leading to an improvement in their mental health.⁶⁰⁻⁶²

It is clear that damage is not restricted to the brain in chronic schizophrenics. All of these patients also appear to suffer from extensive thyroid abnormalities.⁶³ I do not know how to repair a damaged thyroid gland. If this is impossible, significant behavioural improvements can only be expected when using a protocol that includes continuous desiccated thyroid gland supplementation.

...all chronic schizophrenics appear to be suffering from badly damaged thyroid glands.

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The eighth and final step in the treatment of schizophrenia involves *treatment for the soul*. Recovering schizophrenics are still one of the few groups society feels free to abuse, ostracise and discriminate against. While it is socially acceptable to admit to cancer, heart disease, multiple sclerosis or Parkinson's disease, admitting to schizophrenia invites fear and derision. To recover, schizophrenics need employment, respect and compassion. Too often, they receive rejection, abuse and insult.

About the Author:

Harold D. Foster, PhD, was born and educated in England. He specialised in geology and geography, earning a BSc in 1964 from University College London and a PhD in 1968 from London University. He is a Canadian by choice, and has been a faculty member in the Department of Geography, University of Victoria, British Columbia, Canada, since 1967.

A tenured professor, Dr Foster has authored or edited some 235 publications, the majority of which focus on reducing disaster losses or identifying the causes of chronic disease or longevity. He has published hypotheses on the origins of numerous diseases including myocardial infarction, AIDS, cancer, diabetes, schizophrenia, multiple sclerosis (MS), amyotrophic lateral sclerosis (ALS), Alzheimer's and Parkinson's diseases, and stroke.

His numerous books include: *Disaster Planning: The Preservation of Life and Property* (Springer Verlag, New York, 1980); *Reducing Cancer Mortality: A Geographical Perspective* (Western Geographical Press, Victoria, 1986);

The Ozymandias Principles: Thirty-one Strategies for Surviving Change (Southdowne Press, Victoria, 1997); and *What Really Causes AIDS* (Trafford Publishing, Victoria, 2002; see review in NEXUS 10/05) and *What Really Causes Schizophrenia* (Trafford, 2003; see review in NEXUS 11/02).

Harold Foster is a member of the Explorers Club as well as several academic organisations including The New York Academy of Sciences, The Royal Geographical Society and The Royal Society of Literature.

He is also the editor of both the International and Canadian *Western Geographical Series* and is a member of the boards of the *Journal of Orthomolecular Medicine* and the International Schizophrenia Foundation.

He has been a consultant to numerous organisations, including the United Nations and NATO, and to the governments of Canada, Ontario and British Columbia.

He is also a member of the Science Advisory Panel for the Healthy Water Association.

Every day, Dr Foster makes a point of taking at least the recommended daily allowance of the known essential nutrients.

He is also currently pursuing offers for his suggested nutrient mixture to be produced for use in clinical trials with AIDS patients.

For a more detailed résumé, visit Dr Foster's website, <http://www.hdfoster.com>. Copies of his books, *The Ozymandias Principles*, *What Really Causes AIDS* and *What Really Causes Schizophrenia*, can be freely downloaded from his website.

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SUPPRESSED DISCOVERIES IN PHYSICS

*The "rock-solid"
foundations of
physics are
increasingly being
undermined by
emerging evidence
that challenges
"established"
theories, but the
scientific orthodoxy
is in denial.*

Part 2 of 2

by Rochus Boerner

© December 2003 – February 2004

Email: rochus.boerner@asu.edu

Website:

<http://www.suppressedscience.net/>

DOUBTS ABOUT VALIDITY OF RELATIVITY THEORY

Silvertooth's Experiment on the Earth's Absolute Motion

In a 1986 letter to *Nature*,⁴⁴ Ernest W. Silvertooth writes that he constructed an interferometer capable of detecting the absolute motion of the Earth with respect to the aether. In "Experimental Detection of the Ether"⁴⁵ and "Motion through the Ether",⁴⁶ Silvertooth reports that, on the particular day of his measurements, the Earth moved at 378 km/s towards the constellation Leo. If relativity is correct, then this result should be complete garbage.

Silvertooth published his findings before NASA launched *COBE*, the first satellite to measure accurately the cosmic microwave background (CMB). Due to Doppler shift, there is a slight anisotropy in the spectrum of the CMB. Based on precise measurements of this anisotropy, it was determined that, relative to the CMB, the heliocentric frame moves at 390 km/s towards Leo. Given the Earth's orbital speed of 30 km/s, this is a very good agreement with Silvertooth's measurement. In a refined experiment, Silvertooth and Whitney⁴⁷ confirmed the earlier result and found a speed of $v = 378$ km/s.

A citation search through ISI Web of Science⁴⁸ reveals no references to any of Silvertooth's papers in the mainstream scientific literature. An online document⁴⁹ briefly mentions his work and dismisses it on the grounds that both the experiment and the theoretical analysis are flawed; but, given how well Silvertooth's result agrees with the independently determined motion of the Earth through the CMB, error seems to be an insufficient explanation. Unless Silvertooth committed outright fraud by simply making a lucky guess as to the Earth's velocity relative to the CMB and then ascribing this guess to an imaginary experiment, the inescapable conclusion would be that translation (i.e., movement with constant speed in physics) can be measured by purely electromagnetic means and that Einstein's theory of special relativity is falsified.

Is the Speed of Light in Interplanetary Space a Constant?

The late physicist Bryan G. Wallace discovered in 1961 that radar distance measurements of the surface of the planet Venus did not confirm the constancy of the speed of light. There were systematic variations in the radar data containing diurnal, lunar and synodic components. Attempting to get his results published in *Physical Review Letters*, he encountered great resistance from referees, and eventually settled for a lesser journal.⁵⁰ In a letter to *Physics Today*, Wallace summarises his findings as follows:⁵¹

"The 1961 interplanetary radar contact with Venus presented the first opportunity to overcome technological limitations and perform direct experiments of Einstein's second postulate of a constant light speed of c in space. When the radar calculations were based on the postulate, the observed-computed residuals ranged to over 3 milliseconds of the expected error of 10 microseconds from the best general relativity fit the Lincoln Lab could generate, a variation range of over 30,000%. An analysis of the data showed a component that was relativistic in a $c + v$ Galilean sense."

Let's do a quick reality check here. If the speed of light in interplanetary space is non-constant, how could NASA not have noticed this in its robotic exploration of the solar system? Wallace makes the scandalous claim that NASA *has* noticed, and has been using equations with non-relativistic components to calculate signal transit times in the solar system all along.⁵²

"At the December 1974 AAS [American Astronomical Society] Dynamical Astronomy Meeting, E. M. Standish, Jr, of JPL reported that significant unexplained systematic

variations existed in all the interplanetary data, and that they are forced to use empirical correction factors that have no theoretical foundation."

In a 1973 paper,⁵³ Wallace describes how the Lincoln Lab introduced averaging to suppress the anomalous radar results and refused to release the raw data to him, stonewalling his investigation:

"The apparent improvement in the residuals for later years was due to the fact that the Lab interpolated the 1964 Venus data to 12:00 UT and the 1967 data to one observation a day from 2:12 UT to 2:21 UT. The observing time for the 1961 data ranged from 00:33 UT to 23:40 UT. The involved radar astronomers are publicly claiming nearly complete agreement between their recent radar analysis and general relativity, but my investigation reveals otherwise.

"At the Fourth Texas Symposium of Relativistic Astrophysics, I. I. Shapiro of the Lincoln Lab promised to send me any data I wanted. I read in an article published by the Lab that they had data for the same observing dates covering a wide range of daily observing times from both the MIT and USSR radar stations. I wrote Shapiro requesting this data 2/13/69; his letters of 2/28/69 and 3/12/69 ignored my request. I made an issue of this in my letter to him of 3/20/69, and in his reply of 3/27/69 he stated, 'Unfortunately the data do not exist in the form in which you wanted them and, hence, I cannot honor your request.'

"Shapiro later sent me data that were completely worthless for making an objective test of the relative velocity of light in space. The data were from two MIT radar stations in Massachusetts. The separation between them was only 0.2' of longitude and 20.6" of latitude and the observations had been interpolated to 2:12 UT to 2:21 UT with only one observation per day. It seems obvious that the Lab eliminated the variations by interpolating the data for each day to the one observing time for that day that agreed with the general relativity prediction. One could use the same method to prove that a stopped clock keeps perfect time."

A subsequent letter submitted to *Physics Today* on July 9, 1984, was denied publication. Wallace has reproduced this letter in the Publication Politics chapter of his online book, *The Farce of Physics*.⁵⁴ In it, he writes:

"The speed of light is $c + v$ "...

"During a current literature search, I requested and received a reprint of a paper (T. D. Moyer, *Celes. Mech.* 23:33 [1981] published by Theodore D. Moyer of the Jet Propulsion Laboratory. The paper reports the methods used to obtain accurate values of range observables for radio and radar signals in the solar system. The paper's (A6) equation and the accompanying information that calls for evaluating the position vectors at the signal reception time is nearly equivalent to the Galilean $c + v$ equation (2) in my paper, "Radar Testing of the Relative Velocity of Light in Space" (B. G. Wallace, *Spectros. Lett.* 2:361 [1969]). The additional terms in the (A6) equation correct for the effects of the troposphere and charged particles, as well as the general relativity effects of gravity and velocity time dilation.

"The fact that the radio astronomers have been reluctant to acknowledge the full theoretical implications of their work is probably related to the unfortunate things that tend to happen to physicists that are rash enough to challenge Einstein's sacred second postulate. Over twenty-three years have gone by since the original Venus radar experiments clearly showed that the speed of light in space was not constant, and still the average scientist is not aware of this fact! This demonstrates why it is important for the APS [American Physical Society] to bring true scientific freedom to the *PR* [*Physical Review*] journal's editorial policy."

Supporting evidence comes from Ronald Hatch, who finds that the NASA equations for interplanetary navigation follow his MLET theory rather than special relativity:⁵⁵

"The experimental evidence is almost overwhelming in support of the MLET view. There is a large disjoint between the SRT theorists and the experimentalists. The SRT theorists continue to claim that the speed of light is automatically the velocity c and isotropic with respect to the moving observer or experiment. But the SRT experimentalists do what is necessary to explain and make sense of the measurements. The equations for tracking and navigating the interplanetary probes developed by the Jet Propulsion Laboratory (JPL) for NASA clearly follow the MLET template."

Mr Wallace died on April 19, 1997, his findings ignored and thus neither confirmed nor refuted by the physics establishment. The question remains: Is the speed of light in interplanetary space subject to systematic variations in time?

It is therefore imperative that systematic, high-precision speed-of-light experiments be performed in Earth orbit and interplanetary space. No such experiments have been carried out yet (why test a theory that you already know is correct?) but majority opinion has been changing lately. Attempts to reconcile general relativity with

quantum theory have been a notable failure, and physicists have come to suspect that a unified field theory must involve "small" violations of special and general relativity.

Müller et al. state:⁵⁶

"Special relativity (SR) underlies all accepted theories of nature at the fundamental level. Therefore, it has been and must be tested with ever-increasing precision to provide a firm basis for its future application. Such tests are also motivated by the efforts to unify gravity with the other forces of nature, one of the outstanding open challenges in modern science. In fact, many currently discussed models of quantum gravity do violate the principles of SR."

This has finally created a renewed interest in testing both relativity theories experimentally to high precision. German physicists are currently designing the OPTIS mission,⁵⁷ a satellite carrying ultra-high-precision experiments to test key assumptions and predictions of relativity—among them, the isotropy and constancy of the speed of light. As expected, the OPTIS mission objective is to confirm special and general relativity, or, at most, to find weak violations:⁵⁸

"New unifying theories (e.g., the String Theory) predict small deviations from the Special and General Relativity. If such deviations could be found (e.g., an anisotropy of the speed of light), the

"The fact that the radio astronomers have been reluctant to acknowledge the full theoretical implications of their work is probably related to the unfortunate things that tend to happen to physicists that are rash enough to challenge Einstein's sacred second postulate."

way to a new understanding of the time and space structure of the universe would be open."

The motivation to conduct such experiments in Earth orbit is solely due to technological considerations and has nothing to do with the dissident argument that space-based tests of special relativity might produce radically different results than ground-based ones. But if Dayton Miller and other relativity critics are right, OPTIS may find much more than small deviations.

As of February 2004, it is still uncertain whether OPTIS will receive necessary funding. The journal *Nature* gives the following update:⁵⁹

"OPTIS has received funding from the German Space Agency, and [project scientist] Schiller hopes for support from the European Space Agency (ESA). 'The central technology issues could be worked out in about four years,' he says—but the project hangs in the balance, pending the nod from ESA. Other space-based searches for Lorentz violation are planned for the International Space Station. These include both Michelson–Morley-type experiments and ones involving atomic clocks. The earliest launch date for any of these is 2005."

Evidence for Superluminal Signals

There is some evidence for the existence of superluminal signals in nature, which contradicts the special relativistic idea that such signals violate causality and are therefore impossible.

W. A. Rodrigues, Jr and others have constructed formal solutions with arbitrary speeds $0 < v < c$ of the main relativistic wave equations.⁶⁰ They call these solutions *undistorted progressive waves* (UPWs). These formal solutions have infinite energy and can therefore not exist in reality; however, numerical simulations and experiments with sound waves suggest that so-called finite

aperture approximations to these waves can be generated.⁶¹ Such has been done, however, in all the finite aperture approximations experimentally produced, only the peaks move superluminally; the wave fronts move at c , excluding the possibility of superluminal signalling.⁶²

In "Finite energy superluminal solutions of Maxwell equations",⁶³ de Oliveira and Rodrigues show that genuinely superluminal, finite-energy vacuum solutions of Maxwell's equations exist, which unfortunately cannot be produced by a finite antenna. The authors state, however, that "even if the new superluminal solutions cannot be produced by physical devices, the only possible reason for their non-existence in our universe is that of a possible violation of the principle of relativity".

Thomas Van Flandern shows in a series of papers that the force of gravity must act in exactly the same fashion as it is calculated by astronomers; that is, near instantaneously. Otherwise, angular momentum would no longer be conserved and planetary orbits would be unstable. In "The Speed of Gravity – What the Experiments Say",⁶⁴ he writes:

"Standard experimental techniques exist to determine the propagation speed of forces. When we apply these techniques to gravity, they all yield propagation speeds too great to measure, substantially faster than lightspeed. This is because gravity, in contrast to light, has no detectable aberration or propagation delay for its action, even for cases (such as binary pulsars) where sources of gravity accelerate significantly during the light time from source

to target. By contrast, the finite propagation speed of light causes radiation pressure forces to have a non-radial component causing orbits to decay (the "Poynting-Robertson effect"); but gravity has no counterpart force proportional to v/c to first order.

"General relativity (GR) explains these features by suggesting that gravitation (unlike electromagnetic forces) is a pure geometric effect of curved space-time, not a force of nature that propagates. Gravitational radiation, which surely does propagate at lightspeed but is a fifth-order effect in v/c , is too small to play a role in explaining this difference in behavior between gravity and ordinary forces of nature. Problems with the causality principle also exist for GR in this connection, such as explaining how the external fields between binary black holes manage to continually update without benefit of communication with the masses hidden behind event horizons.

"These causality problems would be solved without any change to the mathematical formalism of GR, but only to its interpretation, if gravity is once again taken to be a propagating force of nature in flat spacetime with the propagation speed indicated by observational evidence and experiments: not less than $2 \cdot 10^{10} c$.

"Such a change of perspective requires no change in the assumed

character of gravitational radiation or its lightspeed propagation. Although faster-than-light force propagation speeds do violate Einstein[ian] special relativity (SR), they are in accord with Lorentzian relativity, which has never been experimentally distinguished from SR—at least, not in favor of SR. Indeed, far from upsetting much of current physics, the main changes induced by this new perspective are beneficial to areas where physics has been struggling, such as explaining experimental evidence for non-locality in quantum physics, the dark matter issue in cosmology, and the possible unification of

"Recognition of a faster-than-lightspeed propagation of gravity, as indicated by all existing experimental evidence, may be the key to taking conventional physics to the next plateau."

forces. Recognition of a faster-than-lightspeed propagation of gravity, as indicated by all existing experimental evidence, may be the key to taking conventional physics to the next plateau."

In a 2002 paper,⁶⁵ Van Flandern and Vigier extend these results and conclude that the alleged Einstein "general speed limit" of c must be invalid. It must be understood that if the existence of instantaneous signals (rather than "just" superluminal ones) were confirmed, this would instantly invalidate special relativity, which is founded on the impossibility of synchronising two distant clocks by means of an instantaneous signal.

Suppression of a Flaw in Quantum Theory

D. L. Hotson shares the following suppression story in "Dirac's Equation and the Sea of Negative Energy"⁶⁶ (talking about himself in the third person):

"...Unfortunately, he could not resist asking awkward questions. His professors taught that conservation of mass–energy is the never-violated, rock-solid foundation of all physics. In 'pair production', a photon of at least 1.022 MeV 'creates' an electron-positron pair, each with 0.511 MeV of rest energy, with any excess being the momentum of the 'created' pair. So supposedly the conservation books balance.

"But the 'created' electron and positron both have spin (angular momentum) energy of $\hbar/4\pi$. By any assumption as to the size of electron or positron, this is far more energy than that supplied by the photon at 'creation'.

"Isn't angular momentum energy?" he asked a professor.

"Of course it is. This half-integer spin angular momentum is the energy needed by the electron to set up a stable standing wave around the proton. Thus it is responsible for the Pauli exclusion principle, hence for the extension and stability of all matter. You could say it is the sole cause of the periodic table of elements."

"Then where does all this energy come from? How can the "created" electron have something like sixteen times more energy than the photon that supposedly "created" it? Isn't this a huge violation of your never-violated, rock-solid foundation of physics?"

"We regard spin angular momentum as an "inherent property" of [the] electron and positron, not as a violation of conservation."

"But if it's real energy, where does it come from?..."

"Inherent property" means we don't talk about it, and you won't either if you want to pass this course."

"Later, Mr Hotson was taken aside and told that his 'attitude' was disrupting the class, and that further, with his 'attitude', there was no chance in hell of his completing a graduate program in physics, so 'save your money'."

"He ended up at the Sorbonne studying French literature and later became a professional land surveyor."

THE BIG BANG SCANDAL

Big Bang cosmology, which is built on general relativity theory, is forced to use a number of adjustable parameters and *ad hoc* assumptions to agree with observation, such as inflation, the assumption that most of the mass of the universe must consist of "dark matter"—a kind of matter that cannot be detected, but nevertheless must exist for the sole reason that Big Bang theory requires it—and now the latest fad, "dark energy".

Two of the three vaunted "predictions" of Big Bang theory—the light element abundances and the temperature of the microwave background—are actually *retrodictions*, meaning that the theory failed to predict them quantitatively correctly and was then adjusted after the data came in so as to fit the observational evidence.⁶⁷

The third "prediction"—the Hubble expansion—is entirely a figment of the imagination, as veteran astronomer Halton Arp has pointed out for decades. There are ample examples of high-redshift quasars that are physically connected to low-redshift galaxies, and there is evidence that redshift is quantised. But astronomy has failed to self-correct, and the only acknowledgement Arp received from the scientific establishment was to be largely (though not completely⁶⁸) banned from publication in scientific journals or from speaking at conferences, and to be denied telescope time. He gives details in *Quasars, Redshifts, and Controversies*.⁶⁹

"Around 1980, I had tried to make a customary tennis date with an old and valued Caltech friend who had been a longtime opponent on the subject of quasars. He was embarrassed and evasive. On the following day, the six-person allocation committee, of which he was a member, sent me an unsigned letter stating that my research was judged to be without value and that they intended to refuse allocation of further observing time..."

"A number of directors of other observatories as well as other well-known astronomers communicated to the director of my observatory, strongly supporting my research and opposing the

action of the allocation committee. I challenged members of the committee to debate the actual scientific facts. But none of this prevented the inevitable last act. My observations on the 200-inch telescope at Palomar terminated in 1983, and at Las Campanas in 1984."

Arp found scientific asylum at the Max Planck Institut für Astrophysik in Munich, Germany, where he was allowed to continue his work. But the suppression continued. In *Seeing Red: Redshifts, Cosmology and Academic Science*, Arp relates the following story:⁷⁰

"Just another isolated case.' Your eye slid over that phrase because you wanted to see whether the referee was going to recommend publication. The answer was: 'not for the *Astrophysical Journal Letters*'. The message behind the smooth, assured phrase was clear: 'No matter how conclusive the evidence, we have the power to minimize and suppress it'. What was the observation this time? Just two X-ray sources unmistakably paired across a galaxy well known for its eruptive activity. The paper reported that these compact sources of high-energy emission were both quasars, stellar-appearing objects of much higher redshift than the central galaxy, NGC4258. Obviously, they had originated from the galaxy, in contradiction to all official rules. Slyly, the referee remarked that 'because there was no known cause for such intrinsic, excessive redshifts, the author should include a brief outline of a theory to explain them'."

"My mind flashed back through 30 years of evidence, ignored by people who were sure of their theoretical assumptions. Anger was my only honest option—but stronger than that provoked by worse 'peer reviews' because this was not even my paper. I did not have to stop and worry that my response was ruled by wounded personal ego."

"How did this latest skirmish begin? Several years earlier, an X-ray astronomer had come into my office with a map of the field around NGC4258. There were two

conspicuous X-ray sources paired across the nucleus of the galaxy. He asked if I knew where he could get a good photograph of the field, so he could check whether there were any optical objects that could be identified with the X-ray sources. I was very pleased to be able to swivel my chair around to the bookshelves in back of me and pull out one of the best prints in existence of that particular field. I had taken it with the Kitt Peak National Observatory 4-meter telescope about a dozen years previously..."

"Wolfgang Pietsch quickly found a small pointing correction to the satellite positions and established that his X-ray pair coincided with blue stellar objects at about 20th apparent magnitude. At that instant I knew that the objects were almost certainly quasars, and once again experienced that euphoria that comes at the moment when you see a long way into a different future. In view of the obvious nature of these objects, I felt Pietsch showed courage and scientific integrity in publishing the comment: 'If the connection of these sources with the galaxy is real, they may be bipolar ejecta from the nucleus'."

Arp then describes how establishment obstruction delayed the necessary confirmatory observation for two years.

"Then the dance of evasion began. It was necessary to obtain optical spectra of the blue stellar candidates to confirm that they were quasars and ascertain their redshifts. A small amount of time

Two of the three vaunted "predictions" of Big Bang theory are actually *retrodictions*, meaning that the theory failed to predict them quantitatively correctly and was then adjusted after the data came in so as to fit the observational evidence.

was requested on the appropriate European telescope. It was turned down. Pietsch's eyes avoided mine when he said, 'I guess I did not explain it clearly enough'. The Director of the world's largest telescope in the US requested a brief observation to get the redshifts. It was not done. The Director of the X-ray Institute requested confirmation. It was not done.

"Finally, after nearly two years, E. Margaret Burbidge with the relatively small 3-meter reflector on Mount Hamilton, on a winter night against the night sky glow from San Jose, recorded the spectra of both quasars. It was fortunate that mandatory retirement had been abolished in the US because, by this time, Margaret had over 50 years of observing experience. Of course, the referee report from which I quoted was directed against her paper, which reported this important new observation. In her firm but lady-like English way, Margaret withdrew her paper from the *Astrophysical Journal Letters* and submitted it to the European journal *Astronomy and Astrophysics Letters*."

Arp concludes and generalises:

"What was particularly appalling about this series of events was that Margaret Burbidge was someone who had given long and distinguished service to the scientific community: Professor at the University of California, Director of the Royal Greenwich Observatory and President of the American Association for the Advancement of Science, among other contributions. It seems it was permissible to let her fly anywhere in the world doing onerous administrative tasks, but her scientific accomplishments were not to be accorded elementary scientific respect and fair treatment.

"Some would argue that this is a special case, owing to the climate of opinion where the offices of the *Astrophysical Journal Letters* are located. But, as events in the following chapters make clear, the problem is pervasive throughout astronomy and, contrary to its projected image, endemic throughout most of current science. Scientists, particularly at the most prestigious institutions, regularly suppress and ridicule findings which contradict their current theories and assumptions."

G. Burbidge gives the following devastating summary of the anti-scientific conduct of the astrophysical establishment:⁷¹

"The existence of a class of objects which have redshifts not largely due to the cosmic expansion was not predicted either in the hot big bang cosmology or in QSSC. How is this phenomenon dealt with in each hypothesis? As far as that big bang model is concerned, its supporters are in complete denial. They never mention the observational evidence, do not allow observers who would like to report such evidence any opportunity to do this in cosmology conferences, argue against its publication, and if forced to comment on the data simply argue that they are wrong."

Thomas Van Flandern's recent paper, "The Top 30 Problems with the Big Bang",⁷² gives an overview of problems with Big Bang cosmology and concludes:

"The Big Bang...no longer makes testable predictions wherein proponents agree that a failure would falsify the hypothesis. Instead, the theory is continually amended to account for all new, unexpected discoveries. Indeed, many young scientists now think of this as a normal process in science! They forget, or were never taught, that a model has value only when it can predict new things that differentiate the model from chance and from other models

before the new things are discovered. Explanations of new things are supposed to flow from the basic theory itself with, at most, an adjustable parameter or two, and not from add-on bits of new theory.

"...Perhaps never in the history of science has so much quality evidence accumulated against a model so widely accepted within a field. Even the most basic elements of the theory, the expansion of the universe and the fireball remnant radiation, remain interpretations with credible alternative explanations. One must wonder why, in this circumstance, four good alternative models are not even being comparatively discussed by most astronomers."

One of these models is Quasi-Steady State Cosmology (QSSC), proposed in 1993 by Hoyle, Burbidge and Narlikar.^{73,74}

THE ANTIGRAVITY CONTROVERSY

In 1992, Russian scientist Eugene Podkletnov published claims to have observed partial gravitational shielding above a rotating superconductor.⁷⁵ The scientific establishment reacted with scorn and dismissed the claims on *a priori* grounds:⁷⁶

"Most physicists laughed at Podkletnov's report. Riley Newman, a professor of physics at UC Irvine who has been involved in gravity research for 20 years, typified the reaction when he commented, 'I think it's safe to say gravity shielding is not conceivable'. Like many scientists, he felt that Podkletnov must have made a mistake, measuring magnetic fields or air currents instead of genuine weight reduction.

"And yet, few of Podkletnov's critics actually bothered to read his description of his work. Their reaction was so dismissive, it almost sounded like prejudice. From their perspective he was an outsider, a nonmember of the 'gravity establishment'. They couldn't believe that a major discovery in physics had been made by such a no-status dilettante fooling around at some obscure lab in Finland."

Podkletnov's claims received major publicity in 1996, when the UK

Sunday Telegraph of September 1 reported that a follow-up paper was about to be published in the British *Journal of Physics D*. Podkletnov later withdrew the paper under curious circumstances, as *New Scientist* reports:⁷⁷

"But Podkletnov has now withdrawn the paper, just weeks before it was due to appear. His decision follows a bizarre series of developments triggered by media interest in the device. Earlier this month [September 1996], Tampere University issued a carefully worded statement denying all knowledge of the antigravity research. While admitting that it had been involved in some preliminary experiments done by Podkletnov in the early 1990s, the university said he was no longer on the staff.

"Suspensions deepened when Vuorinen, the supposed coauthor of the paper, issued a statement denying that he had ever worked on antigravity with Podkletnov.

"The furore appears to have surprised Podkletnov, who insists that the claims made in the paper are genuine. But he says the university is correct in denying the existence of any recent research, as the paper centres on experiments carried out in 1992.

"On the key issue of Vuorinen's denial of involvement in the work, Podkletnov says that there must have been some confusion over names, and that another Petri Vuorinen was the true coauthor. Podkletnov does have an unpaid affiliation with Tampere's Institute

In 1992, Russian scientist Eugene Podkletnov published claims to have observed partial gravitational shielding above a rotating superconductor. The scientific establishment reacted with scorn and dismissed the claims.

of Material Science. However, inquiries have failed to uncover anyone with a similar name at the university who admits to working on the antigravity research.

"The controversy also appears to have shocked the Institute of Physics, which publishes the *Journal of Physics D*. Three referees failed to find any major flaw in the paper's claims, which if confirmed would rate as one of the greatest scientific breakthroughs in history.

"Gravity is the most ubiquitous force in the Universe, and no one has ever found any way of shielding matter from its effects. The discovery of a shielding effect would have huge theoretical and commercial implications.

"Faced with Tampere University's statement and Vuorinen's denial that he was involved, Richard Palmer, managing editor of the journal, decided to put the paper on hold pending further inquiries. Three days later, on 9 September, Podkletnov solved the institute's dilemma by withdrawing his paper. He gave no reason. But he stands by his claims: 'This is an important discovery and I don't want it to disappear,' he told *New Scientist*.

"The paper may now never appear in any physics journal: Podkletnov is said to have been put under pressure from unknown 'funding agencies' not to reveal any more, pending patent applications.

"Even so, the mystery of the anti-gravity machine lingers. What is known is that the paper had passed scrutiny by independent experts in superconductivity, and had been accepted by a reputable journal. Tampere University itself concedes that Podkletnov has a good reputation for research, and refuses to pass judgement on whether the antigravity machine actually works..."

Podkletnov was subsequently thrown out of the university. But despite the controversy, NASA's Marshall Space Flight Center in Alabama decided to investigate his claims.⁷⁸

The first attempt at replication failed, but it had been conducted without sufficient knowledge of the original experiment.⁷⁹ As of 2002, NASA was still working on a second attempt.

Podkletnov now says that he can generate repulsive force beams. According to Nick Cook:⁸⁰

"Meanwhile, Mr Podkletnov, now based at the Moscow Chemical Scientific Research Centre, has taken his ideas further. Last year [2001] he published another paper—backed by Giovanni Modanese, an Italian physicist—detailing work on an 'impulse gravity generator' that is capable of exerting a repulsive force on all matter.

"Using a strong electrical discharge source and a superconducting 'emitter', the equipment has produced a 'gravity impulse', Mr Podkletnov says, 'that is very short in time and propagates with great speed (practically instantaneously) along the line of discharge, passing through different objects without any observable loss of energy'.

"The result, he maintains, is a repulsive action on any object the beam hits, that is proportional to its mass. When fitted to a laser pointing device, Mr Podkletnov says, his laboratory installation has already demonstrated its ability to knock over objects more than a kilometre away. The same installation, he maintains, could hit objects up to 200 km away with the same power."

These claims caught the attention of aerospace company Boeing, which has been reported to be researching antigravity.

Whether antigravity will ultimately be proven to exist or not, one thing is already clear: mainstream physics is unwilling to investigate antigravity claims in good faith. Robert L. Park, the spokesman of the American Physical Society, made a typical comment in his What's New column in 2002 that illustrates the unscientific "theory overrides evidence" *modus operandi* of the physics establishment:⁸¹

"Why would Boeing choose to spend millions to test a ridiculous claim by an obscure Russian physicist that has failed every test and is a physical impossibility to begin with?"

THE SECOND LAW UNDER SIEGE

In simple language, the second law of thermodynamics says that, in a closed physical system, useful energy decays into waste heat and you can't win it back.

A machine that produces, say, electrical energy from ambient heat is impossible according to the second law, and is termed a "perpetuum mobile of the second kind".

But the second law is under siege, and it may turn out that this alleged rock-solid law of nature is only a reflection of the limitations of 19th and 20th century engineering.

In a paper titled "A Solid-State Maxwell Demon",⁸² D.P. Sheehan and A.R. Putnam of the Department of Physics and J.H. Wright of the Department of Mathematics and Computer Science of the University of San Diego propose a semiconductor device that would generate useful energy from the thermal noise of an electronic circuit. The authors successfully tested their model on a commercial semiconductor simulator and estimate that the technology necessary to construct a laboratory model will be available by 2007. In their introduction, they write:

"Over the last ten years, an unprecedented number of challenges have been leveled against the absolute status of the second law of thermodynamics. During this period, roughly 40 papers have appeared in the general literature, representing more than a dozen distinct challenges; the publication rate is increasing. Recently, for the first time, a major scientific press has commissioned a monograph on the subject and a first international conference has been convened to examine these challenges."

One would think that, given the implications (defeating the second "law" means nothing less than solving the human energy crisis permanently), governments, corporations and the scientific establishment would be interested. But there is very little interest. The prevailing (circular) reasoning remains that machines that violate the second law are impossible because they would contradict the second law.⁸³

A NEW PARADIGM SHIFT

There is widespread belief among physicists and non-physicists alike that physics has essentially "figured out" the universe. According to this "end of science" argument,⁸⁴ all that remains to the great enterprise of science is to connect a few dots and do some fine-tuning. But this satisfactory state of affairs is a mere illusion

"Why would Boeing choose to spend millions to test a ridiculous claim by an obscure Russian physicist that has failed every test and is a physical impossibility to begin with?"

Continued on page 75

— SUPERLIGHT —
 "One Source, One Force"

by John V. Milewski, PhD

© 1993, revised 1995, 2001, 2004

Introduction

Since 1963 I have been growing single-crystal fibres called "whiskers". My first company, Thermokinetic Fibers (1963–68), was the world's first commercial source of whisker material.

So what are whiskers? They are high-purity single crystals grown in or on one axis, so that they form a fibre material. These perfect crystals are the strongest materials in the world! We grow these by a process known as VLS, which stands for "vapour, liquid, solid".

When frost forms on your window, it is a vapour–solid crystal growth process. When ice forms in a pond, it is a liquid–solid crystal growth process.

Our process is different from these two. By changing the chemistry of the feed gas and catalyst, fibre crystals of almost any kind of material can be grown.

The literature gives over 60 different elements or compounds that have been grown as whiskers.

What is SuperLight?

Regular light is electric light or *electromagnetic* radiation. SuperLight is magnetic light, or *magneto-electric* radiation.

There is parity or symmetry in the Universe. Everything has an equal and opposite mirror-image counterpart: the *ying* and the *yang*, right and left, matter and antimatter, electron and positron. So why not light?

SuperLight is the unseen force in nature that has been ignored by science but has been real to the mystics and metaphysicians for thousands of years. It has been given different names by different cultures for thousands of years, i.e., *nous*, *chi*, bio-magnetic energy, Wilhelm Reich's orgone energy, Tesla's free Earth energy, animal magnetism, space energy, vacuum energy, zero point energy, etc. Those who have subtle perception know it is real.

SuperLight was identified scientifically

over 100 years ago when James Clerk Maxwell solved his famous wave equation. This occurred shortly after radio was invented by Nikola Tesla, and theoretical physicists were trying to find a mathematical model to explain radio waves. When using positive numbers in Maxwell's equations, this explains radio waves as well as all forms of electromagnetic radiation such as light, radio, television, microwaves, X-rays, etc.

What his equation also explained 100 years ago was SuperLight, but, because it was a solution that came from the use of negative numbers, this "second solution" was ignored for over 100 years.

Remember when you were taught algebra and were told to ignore imaginary numbers (e.g., the square root of -1) because they have no meaning in this world? Well, times have changed and now we have a very valid second solution to Maxwell's equation, and it is SuperLight.

In the mid-1970s, Dr William Tiller, a scientist at Stanford University, took another look at Maxwell's equation and asked, "What does this second solution explain when interpreted in our world?"

To understand this second solution, we must first review what the first, or positive, solution explains.

The first solution is as follows. Radio waves leave the antenna and radiate out into space from a point source (the antenna) equally in all directions into space towards infinity, travelling at the speed of light. The wave is composed of a large electrical component and a small magnetic component 90 degrees to the electrical component, thus the name *electromagnetic radiation*.

The second solution describes a particle wave of just the opposite structure. It explains that, from infinity, travelling towards the point source from all directions radiates SuperLight. This new radiation is composed of a large magnetic component and a small electrical component, thus the name *magneto-electric radiation*.

When the equations are looked at more closely, one finds that "SuperLight" travels at the speed of light squared, i.e., at 10^{20} metres per second, or 10 billion times faster than light! It has a frequency 10 billion times higher and has a corresponding, shorter wavelength. It therefore has a higher energy density.

The question one asks immediately is, "If it is so powerful, why don't we feel it and why hasn't it been detected scientifically?" Well, the frequency is so high, its wavelength so short (4×10^{-8} nanometres, or $4 \times$



10⁻¹⁷ metres), its velocity so fast, that it goes through everything as though the substance was nearly completely transparent (like glass). We can say the higher frequency is completely penetrating like X-rays, but even more so.

The Source of SuperLight

Where does SuperLight originate? It comes out of black holes!

Regular electromagnetic radiation or light is formed when electric monopoles give off energy. The electron in orbit about our atoms is an electric monopole; as it changes its orbit, it either gives off or absorbs energy in the form of electromagnetic radiation. Sunlight is converted into electricity by this process in a solar cell. Just the opposite occurs in optical diodes, which convert electricity into light.

So, electromagnetic radiation or visible light is produced when an electron (an electric monopole) lowers its orbit and releases its energy in the form of light.

Now, I believe a similar event occurs in the extremely dense and hot matter found in black holes.

It is theorised that black holes contain magnetic monopoles and that, when these extremely dense, extremely small, extremely energetic magnetic monopoles release energy by lowering their orbit, they radiate magneto-electric radiation, our SuperLight.

So black holes really are not so black: they are radiant beings of SuperLight! SuperLight easily escapes the strong gravitational forces of black holes because its velocity is the square of the velocity of light.

The current scientific thinking is that in the centre of every galaxy in the Universe is a black hole. There are billions and billions of galaxies all around us, and they all are producing SuperLight. We are literally bathed in a three-dimensional dynamic energy field, or an Aether of SuperLight, a Dynamic Aether.

Superlight and Life

I believe that SuperLight is the prime activating energy in the Universe and accounts for the production of what we call *life*. SuperLight interacts with special forms of matter in our bodies and produces what we call *vital life forces*. These special forms of matter are found in bones, microcrystals and in the various fluids in the body that contain cell salts. There is evidence to believe there are organic molecules in some body fluids that are liquid crystalline in structure. These change state (liquid to crystal) very readily, with an extremely small change in energy (e.g., emotions).

Another form of organised structure found in the body is the multitude of long, parallel, conductive protein structures, which form phased array-like structures.² Like the phased-array radio telescope in Socorro, New Mexico, they pick up extreme weak signals and amplify them by being in phase. It is also suggested these proteins may have room-temperature superconductivity.

These organised structures in living things produce a coherence that has resonance with very minute amounts of SuperLight. Most of it passes through matter, between the nucleus and electron, without even coming in contact with them.

Our body is electronic in nature³⁻⁵ and is composed of millions and billions of micro-electronic units that are formed in structures that have a phased-array organisation.⁶ I believe that the electronic resonance in these organised conductive molecules have some resonance with very small amounts of SuperLight, and that these energy fields and currents are responsible for the human aura and the energy vortices found in the body *chakra* area. They also produce the vital life forces. But, since SuperLight is so powerful, even a very, very small amount produces more than enough energy to sustain life.

Thus, life is produced and sustained by specific forms and amounts of organised matter, and old age and eventual death occur when too much disorder or disease comes into our bodies and breaks up this ordered structure. At that point, the body can no longer produce enough vital life force from SuperLight to sustain itself. I also believe that all forms of organised matter produce their own aura fingerprints, or energy signature, when it reacts with SuperLight.

Crystals are very organised structures and thus, according to this thesis, are also converters or transducers of SuperLight. This is

where their energy comes from, and explains how they seemingly can radiate a positive signal continuously without being recharged.

As scientists and experimenters become more aware of SuperLight and start to understand it, experiments and instruments will be designed to attune to these energies. I conceive of manufacturing, in the future, simulated body structures⁷ that will be micro-sized phased-array assemblies made of room-temperature superconductors, designed to convert SuperLight into vital life force for healing. Specific

microstructures will be designed to attune to and resonate with the exact energy needed in the specific part of the body that needs an energy boost for healing and regeneration.

Soon, I hope to be able to grow my fibre crystals long enough, and in large enough quantities, that we will be able to spin these crystals into yarn.

I believe that it will be possible to make room-temperature superconductors of crystal fibre. If this becomes possible, we are talking about levitation and possibly even a "magic carpet" made from such fibres.

The door is wide open with the possibilities of working with SuperLight energies through the use of single-crystal fibres. I believe these need to be high-purity crystal fibres in order to have the coherence necessary to resonate with SuperLight.

SuperLight and Gravity

Gravity is not an intrinsic property of matter; neither is inertia. These secondary forces are both formed by the reaction of matter to the dynamic field of SuperLight. Gravity is not an attraction! It is the result of a universal pressure exerted by SuperLight as it rains in from infinity, from all directions, onto every object.

Materials are not 100% transparent to SuperLight; I estimate perhaps about 99.99999999% transparent. As a consequence, all material domains, all "matter", experiences an acceleration caused by SuperLight. Every "particle" is affected by a slight drag, or

**Everything has an equal
and opposite mirror-image
counterpart:
the *ying* and the *yang*,
right and left,
matter and antimatter,
electron and positron.
So why not light?**

pressure differential, as SuperLight travels past and through them.

Quantum particle interactions come into play as SuperLight joins in or exits the activities of the particle domain. Field effects come into play as the SuperLight entity travels through the atomic atmosphere, producing drag.

Drag turbulence and particle pressures combine to produce the accelerational force we know as *gravity*. This acceleration is of little consequence when a single object is in space, at a very great distance from other objects, since the force vectors cancel out. However, when a second object comes close to the first object, the two objects then shield each other from the full power of SuperLight pressure on the opposite sides of the objects facing each other.

As a result of this, the objects experience a net accelerational force towards each other, which is directly proportional to their mass—mass that produces the mutual shielding that each object experiences.

Thus, falsely, each object is said to be attracted to each other! In reality, they are being pushed together by the net differential force of SuperLight pressure which results from the slight absorption of SuperLight as it passes through these objects. This, according to my theory, is what creates gravity. It is a push exerted by SuperLight on objects shielding each other from a portion of the SuperLight radiation. Gravity then becomes the "weak force" from the effects of porous matter.

An atom of matter is about 10^{18} parts void for each part of solid matter. The wavelength of SuperLight is much smaller than the typical atomic dimension. Thus, most of the SuperLight passes through the atomic structure unopposed.

However, when SuperLight contacts the nucleus or electrons, it produces the force that holds the electrons in orbit and the nucleus together. It is the nuclear glue. This gives matter its chemical properties.

Thus, gravity is the weak force, since only a very small amount of SuperLight interacts with matter on the atomic scale.

Matter is mostly composed of void or space; and the energy rays of SuperLight, whose wavelength is many times smaller than the diameter of the electron, will to a large extent miss the particle regions as they rain through the atomic region.

Only a small amount of SuperLight interacts with the nucleus and electrons, while the majority will pass right through the region.

Nuclear Force

The structure of the nucleus is extremely dense when compared to that of the atom as a whole. The particles of matter in the nucleus are much closer to each other than those in the electron. The nucleus is probably in the order of 10^{28} more dense. Thus, the force that holds the nucleus together must be very strong.

In reality, it is still the effects of SuperLight pushing and interacting that hold the components of the nucleus together. These stronger interactions on the nucleus are a result of its increased relative density and ability to shield SuperLight. It is the density and geometry of matter that change the forces we see.

Thus, from One Source comes the One Force that divides and manifests itself in so many interesting ways.

The relative packing symmetry is very critical in the nucleus and this accounts for the relative stability of various nuclei. A less symmetrical structure results in radioactivity and an unstable nucleus. In this way, SuperLight helps to explain radioactivity.

Superlight is the Singularity – the Universal Field or Energy Source

I propose that SuperLight energy is the singularity or universal energy force in all nature and that its interaction with various forms of matter and energy produce all other forces in the Universe. Specific atomic and subatomic structures are resonant to and interact with some aspects of SuperLight as it passes through them and our bodies. The energy that is absorbed is converted into the electrical, magnetic, nuclear and gravitational forces producing our vital life force.

This can explain *all* the forces of nature and life energies. The geometry and density of matter explain the different forms and intensity of the forces that are produced.

Energy Source of the Future

I believe that, as we obtain a greater understanding of what types of devices can be attuned to SuperLight, it will be possible to capture this energy, collect it and measure it. At first, just small assemblies (requiring only small amounts of SuperLight) will be made for healing and regeneration, scientific analysis, proof of principle and localised experiments. I envisage that, in the future, massive devices will be used as direct energy converters.

This development will have a significant effect on reducing world pollution associated with most other energy-producing systems such as nuclear and fossil fuels.

SuperLight and Space Travel

Communication on the SuperLight wave bands will permit extreme-distance communication in space in much shorter times, e.g., 100,000 light-years in 3–4 minutes. It eliminates the need to take fuel when you travel in space, thus permitting real deep-space travel.

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About the Author:

John V. Milewski, PhD, is an internationally recognised leader/consultant in advanced materials. He is a professional engineer, scientist, inventor, entrepreneur, writer and editor. He is a graduate of the University of Notre Dame in Chemical Engineering (1951), has an MS in Metallurgy from Stevens Institute of Technology (1959) and a PhD in Ceramic Engineering from Rutgers University (1973). He is a retired staff member of Los Alamos National Labs and founded his research company, Superkinetic, Inc., in 1988. Dr Milewski holds 30 patents and has written over 42 publications and edited four books in his field. In March 2000, the crystal filament light bulb (US Patent #4,864,186) that he invented with his son, Dr Peter D. Milewski, was put on permanent display at the Smithsonian American History Museum.

To contact Dr Milewski, write to Superkinetic, Inc., 2881 Tramway Place NE, Albuquerque NM 87122, USA, tel/fax +1 (505) 856 6259, email jvmilewski@aol.com, or visit his website, <http://www.luminet.net/~wenonah/new/milewski.htm>.

ANCIENT CITIES UNDER THE SANDS OF GIZA

The Giza Plateau and old Cairo are crisscrossed with subterranean passageways, shafts, natural caverns, lakes and chambers that contain surprising artefacts, but the Egyptian authorities are not ready to reveal these to the public.

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THE LOST HISTORY OF THE PYRAMIDS

To comprehend fully the secret information in the Bible, it is important to understand the extent of the subterranean tunnel system and associated chamber facilities existing below the surface of the Pyramid Plateau, for it was there that major elements of Mystery School teachings developed. What happened under the sands thousands of years ago is not reflected in today's history books, and discoveries made in the last eight decades or so verify that point.

The Fayum Oasis district, just a few kilometres outside the boundary of the Memphis Nome, presents a site of unusual interest. It was in that lush, fertile valley that Pharaohs calling themselves the "masters of the royal hunts" fished and hunted with the boomerang.¹ Lake Moeris once bordered the Fayum Oasis and on its shores was the famous Labyrinth, described by Herodotus as "an endless wonder to me". The Labyrinth contained 1,500 rooms and an equal number of underground chambers that the Greek historian was not permitted to inspect. According to Labyrinth priests, "the passages were baffling and intricate", designed to provide safety for the numerous scrolls they said were hidden in subterranean apartments. That massive complex particularly impressed Herodotus and he spoke in awe of the structure:

There I saw twelve palaces regularly disposed, which had communication with each other, interspersed with terraces and arranged around twelve halls. It is hard to believe they are the work of man. The walls are covered with carved figures, and each court is exquisitely built of white marble and surrounded by a colonnade. Near the corner where the labyrinth ends, there is a pyramid, two hundred and forty feet in height, with great carved figures of animals on it and an underground passage by which it can be entered. I was told very credibly that underground chambers and passages connected this pyramid with the pyramids at Memphis.

The pyramids at Memphis were the pyramids at Giza, for Giza was originally called Memphis (see reference, "Giza formerly Memphis" on Nordan's map from *Travels in Egypt and Nubia*, 1757, on page 152 of previous chapter).

Many ancient writers supported Herodotus' record of underground passages connecting major pyramids, and their evidence casts doubt on the reliability of traditionally presented Egyptian history. Crantor (300 BC) stated that there were certain underground pillars in Egypt that contained a written stone record of pre-history, and they lined accessways connecting the pyramids. In his celebrated study, *On the Mysteries, particularly those of the Egyptians, Chaldeans and the Assyrians*, Iamblichus, a fourth-century Syrian representative of the Alexandrian School of mystical and philosophical studies, recorded this information about an entranceway through the body of the Sphinx into the Great Pyramid:²

This entrance, obstructed in our day by sands and rubbish, may still be traced between the forelegs of the crouched colossus. It was formerly closed by a bronze gate whose secret spring could be operated only by the Magi. It was guarded by public respect, and a sort of religious fear maintained its inviolability better than armed protection would have done. In the belly of the Sphinx were cut out galleries leading to the subterranean part of the Great Pyramid. These galleries were so artfully crisscrossed along their course to the Pyramid that, in setting forth into the passage without a guide throughout this network, one ceasingly and inevitably returned to the starting point.

It was recorded in ancient Sumerian cylinder seals that the secret abode of the Anunnaki was "an underground place...entered through a tunnel, its entrance hidden by sand and by what they call Huwana...his teeth as the teeth of a dragon, his face the face of a lion". That remarkable old text, unfortunately fragmented, added that "He [Huwana] is unable to move forward, nor is he able to move back", but they crept up on him from behind and the way to "the secret abode of the Anunnaki" was no longer blocked. The Sumerian record provided a probable description of the lion-headed Sphinx at Giza, and if that great creature was built to guard or obliterate ancient stairways and lower passages leading to subterranean areas below and around it, then its symbolism was most appropriate.

Local 19th-century Arab lore maintained that existing under the Sphinx are secret chambers holding treasures or magical objects. That belief was bolstered by the writings of the first-century Roman historian Pliny, who wrote that deep below the Sphinx is concealed the "tomb of a ruler named Harmakhis that contains great treasure", and, strangely enough, the Sphinx itself was once called "The Great Sphinx Harmakhis who mounted guard since the time of the Followers of Horus". The fourth-century Roman historian Ammianus Marcellinus made additional disclosures about the existence of subterranean vaults that appeared to lead to the interior of the Great Pyramid:³

Inscriptions which the ancients asserted were engraved on the walls of certain underground galleries and passages were constructed deep in the dark interior to preserve ancient wisdom from being lost in the flood.

A manuscript compiled by an Arab writer named Altelemsani is preserved in the British Museum, and it records the existence of a long, square, underground passage between the Great Pyramid and the River Nile with a "strange thing" blocking the Nile entrance. He related the following episode:

In the days of Ahmed Ben Touloun, a party entered the Great Pyramid through the tunnel and found in a side-chamber a goblet of glass of rare colour and texture. As they were leaving, they missed one of the party and, upon returning to seek him, he came out to them naked and laughing said, "Do not follow or seek for me", and then rushed back into the Pyramid. His friends perceived that he was enchanted.

Upon learning about strange happenings under the Pyramid, Ahmed Ben Touloun expressed a desire to see the goblet of glass. During the examination, it was filled with water and weighed, then emptied and re-weighed. The historian wrote that it was "found to be of the same weight when empty as when full of water". If the chronicle is accurate, that lack of additional weight provided indirect evidence of the existence of an extraordinary science at Giza.

According to Masoudi in the 10th century, mechanical statues with amazing capabilities guarded subterranean galleries under

the Great Pyramid. Written one thousand years ago, his description is comparable to the computerised robots shown today in space movies. Masoudi said that the automatons were programmed for intolerance, for they destroyed all "except those who by their conduct were worthy of admission". Masoudi contended that "written accounts of Wisdom and acquisitions in the different arts and sciences were hidden deep, that they might remain as records for the benefit of those who could afterwards comprehend them". That is phenomenal information, as it is possible that, since the times of Masoudi, "worthy" persons have seen the mysterious underground chambers. Masoudi confessed, "I have seen things that one does not describe for fear of making people doubt one's intelligence...but still I have seen them".

In the same century, another writer, Muterdi, gave an account of a bizarre incident in a narrow passage under Giza, where a group of people were horrified to see one of their party crushed to death by a stone door that, by itself, suddenly slid out from the face of the passageway and closed the corridor in front of them.

Herodotus said Egyptian priests recited to him their long-held tradition of "the formation of underground apartments" by the original developers of Memphis. The most ancient inscriptions therefore suggested that there existed some sort of extensive chamber system below the surface of the areas surrounding the Sphinx and pyramids.

Those old records were confirmed when the presence of a large cavity was discovered in a seismic survey conducted at the site in 1993. That detection was publicly acknowledged in a documentary called *The Mystery of the Sphinx*, screened to an audience of 30 million people on NBC TV later that year. The existence of chambers under the Sphinx is well known. Egyptian authorities confirmed another discovery in 1994; its unearthing was announced in a newspaper report that was carried under the headline, "Mystery Tunnel in Sphinx": *Workers repairing the ailing Sphinx have discovered an ancient passage leading deep into the body of the mysterious monument.*

The Giza Antiquities chief, Mr Zahi Hawass, said there was no dispute the tunnel was very old. However, what is puzzling is: who built the passage? Why? And where does it lead...? Mr Hawass said he had no plans to remove the stones blocking the entrance. The secret tunnel burrows into the northern side of the Sphinx, about halfway between the Sphinx's outstretched paws and its tail.⁴

The popular supposition that the Sphinx is the true portal of the Great Pyramid has survived with surprising tenacity. That belief was substantiated by 100-year-old plans prepared by Masonic and Rosicrucian initiates, showing the Sphinx was the ornament surmounting a hall that communicated with all Pyramids by radiating underground passages. Those plans were compiled from information originally discovered by the supposed founder of the Order of the Rosicrucians, Christian Rosenkreuz, who allegedly penetrated a "secret chamber beneath the ground" and there found a library of books full of secret knowledge.

The most ancient inscriptions therefore suggested that there existed some sort of extensive chamber system below the surface of the areas surrounding the Sphinx and pyramids.

The schematic drawings were produced from information possessed by mystery school archivists before sand-clearing commenced in 1925, and revealed hidden doors to long-forgotten reception halls, small temples and other enclosures. (Those plans are included in "The Master Plan" section at the end of the book.)

The knowledge of the mystery schools was strengthened by a series of remarkable discoveries in 1935 that provided proof of additional passageways and chambers interlacing the area below the Pyramids. The Giza complex showed major elements of being a purposely built, uniting structure with the Sphinx, the Great Pyramid and the Temple of the Solar-men directly related to each other, above and below the ground.

Chambers and passageways detected by sophisticated seismograph and ground penetrating radar (GPR) equipment in the last few years established the accuracy of the plans. Egypt is also successfully using sophisticated satellites to identify sites buried beneath the surface at Giza and other locations. The novel tracking system was launched at the beginning of 1998 and the location of 27 unexcavated sites in five areas was precisely determined. Nine of those sites are on Luxor's east bank and the others are in Giza, Abu Rawash, Saqqara and Dashur. The printouts of the Giza area show an almost incomprehensible mass of net-like tunnels and chambers crisscrossing the area, intersecting and entwining each other like latticework extending out across the entire plateau. With the space surveillance project, Egyptologists are able to determine the location of a major site, its probable entrance and the size of chambers before starting excavations. Particular attention is being focused on three secret locations: an area in the desert a few hundred metres west/southwest of the original location of the Black Pyramid, around which is currently being built a massive system of concrete walls seven metres high covering eight square kilometres; the ancient highway that linked the Luxor temple with Karnak; and the "Way of Horus" across northern Sinai.

HEADLINE NEWS

Among the mystics or members of Egyptian mystery schools, tradition explained that the Great Pyramid was great in many ways. Despite the fact that it was not entered until the year 820, the secret schools of pre-Christian Egypt insisted that the interior layout was well known to them. They constantly claimed that it was not a tomb nor a burial chamber of any kind, except that it did have one chamber for symbolic burial as part of an initiation ritual.

According to mystical traditions, the interior was entered gradually and in various stages via underground passageways. Different chambers were said to have existed at the end of each phase of progress, with the highest and ultimate initiatory stage represented by the now-called King's Chamber.

Little by little, the traditions of the mystery schools were verified by archaeological discoveries, for it was ascertained in 1935 that there was a subterranean connection between the Sphinx and

the Great Pyramid and that a tunnel connected the Sphinx to the ancient temple located on its southern side (today called the Temple of the Sphinx).

As Emile Baraize's massive 11-year sand and seashell clearing project neared completion in 1935, remarkable stories started to emerge about discoveries made during the clearing project. A magazine article, written and published in 1935 by Hamilton M. Wright, dealt with an extraordinary discovery under the sands of Giza that is today denied. The article was accompanied by original photographs provided by Dr Selim Hassan, the leader of the scientific investigative team from the University of Cairo who made the discovery. It said:

We have discovered a subway used by the ancient Egyptians of 5,000 years ago. It passes beneath the causeway leading between the second Pyramid and the Sphinx. It provides a means of passing under the causeway from the Cheops Pyramid to the Pyramid of Khephren [Khephren]. From this subway, we have unearthed a series of shafts leading down more than 125 feet, with roomy courts and side chambers.



The boomerang and the fighting bow. Drawn by Faucher-Gudin, from a painting in the tomb of the dwarf Khnumhotpū at Beni-Hasan. (Champollion, *Monuments de l'Egypte*, p. 1, ccc)

Around the same time, the international news media released further details of the find.

The underground connector complex was originally built between the Great Pyramid and the Temple of the Solar-men, for the Pyramid of Khephren was a later and superficial structure. The subway and its apartments were excavated out of solid, living bedrock—a truly extraordinary feat, considering it was built thousands of years ago.

There is more to the story of underground chambers at Giza, for media reports described the unearthing of a subterranean passageway between the Temple of the Solar-men on the plateau and the Temple of the Sphinx in the valley. That passageway had been unearthed a few years before the release and publication of that particular newspaper article.

The discoveries led Dr Selim Hassan and others to believe and publicly state that, while the age of the Sphinx was always enigmatic in the past, it may have been part of the great architectural plan that was deliberately arranged and carried out in association with the erection of the Great Pyramid.

Archaeologists made another major discovery at that time. Around halfway between the Sphinx and Khephren's Pyramid were discovered four enormous vertical shafts, each around eight feet square, leading straight down through solid limestone. It is called "Campbell's Tomb" on the Masonic and Rosicrucian plans, and "that shaft complex", said Dr Selim Hassan, "ended in a spacious room, in the centre of which was another shaft that descended to a roomy court flanked with seven side chambers". Some of the chambers contained huge, sealed sarcophagi of basalt and granite, 18 feet high.

The discovery went further and found that in one of the seven rooms there was yet a third vertical shaft, dropping down deeply to a much lower chamber. At the time of its discovery, it was flooded with water that partly covered a solitary white sarcophagus.

That chamber was named the "Tomb of Osiris" and was shown being "opened for the first time" on a fabricated television documentary in March 1999. While originally exploring in this area in 1935, Dr Selim Hassan said:

We are hoping to find some monuments of importance after clearing out this water. The total depth of these series of shafts is more than 40 metres or more than 125 feet... In the course of clearing the southern part of the subway, there was found a very fine head of a statue which is very expressive in every detail of the face.

According to a separate newspaper report of the time, the statue was an excellent sculpted bust of Queen Nefertiti, described as "a beautiful example of that rare type of art inaugurated in the Amenhotep regime". The whereabouts of that statue today are unknown.

The report also described other chambers and rooms beneath the sands, all interconnected by secret and ornate passageways. Dr Selim Hassan revealed that not only are there inner and outer courts, but they also found a room they named the "Chapel of Offering" that had been cut into a huge, rock outcrop between Campbell's Tomb and the Great Pyramid. In the centre of the chapel are three ornate vertical pillars standing in a triangular shaped layout. Those pillars are highly significant points in this study, for their existence is recorded in the Bible. The conclusion drawn is that Ezra, the initiated Torah writer (c. 397 BC), knew the subterranean layout of passages and chambers at Giza before he wrote the Torah. That underground design was probably the origin of the triangular shaped layout around the central altar in a Masonic lodge. In *Antiquities of the Jews*, Josephus, in the first century, wrote that Enoch of Old Testament fame constructed an underground temple consisting of nine chambers. In a deep vault inside one chamber with three vertical columns, he placed a triangular-shaped tablet of gold bearing upon it the absolute name

of the Deity (God). The description of Enoch's chambers was similar to the description of the Chapel of Offering under the sand just east of the Great Pyramid.

An anteroom much like a burial chamber, but "undoubtedly a room of initiation and reception",⁵ was found higher up the plateau closer to the Great Pyramid and at the upper end of a sloping passage, cut deep into rock on the northwest side of the Chamber of Offering (between the Chamber of Offering and the Great Pyramid). In the centre of the chamber is a 12-foot long sarcophagus of white Turah limestone and a collection of fine alabaster vessels. The walls are beautifully sculpted with scenes, inscriptions and emblems of particularly the lotus flower. The descriptions of alabaster vessels and the emblematic lotus flower have remarkable parallels with what was found in the temple-workshop on the summit of Mt Sinai/Horeb by Sir William Petrie in 1904.

Additional underground rooms, chambers, temples and hallways were discovered, some with vertical circular stone support columns, and others with wall carvings of delicate figures of goddesses clothed in beautiful apparel. Dr Selim Hassan's report described other magnificently carved figures and many beautifully coloured friezes. Photographs were taken and one author and researcher who saw them, Rosicrucian H. Spencer Lewis recorded that he was "deeply impressed" with the images. It is not known where the rare specimens of art and relics are today, but some were rumoured to have been smuggled out of Egypt by private collectors.

The foregoing particulars are but a few contained in Dr Selim Hassan's extensive report that was published in 1944 by the Government Press, Cairo, under the title *Excavations at Giza* (10 volumes). However, that is just a mere fragment of the whole truth of what is under the area of the Pyramids. In the last year of sand clearing, workers uncovered the most amazing discovery that stunned the world and attracted international media coverage.



At the time of Herodotus' visit, there were two large pyramids with "colossal" seated figures on top in the centre of Lake Moeris. This is a pre-1851 engraving of one of those pyramids.

Archaeologists in charge of the discovery were "bewildered" at what they had unearthed, and stated that the city was the most beautifully planned they had ever seen. It is replete with temples, pastel-painted peasant dwellings, workshops, stables and other buildings including a palace. Complete with hydraulic underground waterways, it has a perfect drainage system along with other modern amenities. The intriguing question that arises out of the discovery is: where is that city today?

Its secret location was recently revealed to a select group of people who were given permission to explore and film the city. It exists in a huge natural cavern system below the Giza Plateau that extends out in an easterly direction under Cairo. Its main entry is from inside the Sphinx, with stairs cut into rock that lead down to the cavern below the bedrock of the River Nile.

The expedition carried down generators and inflatable rafts and travelled along an underground river that led to a lake one kilometre wide. On the shores of the lake nestles the city, and permanent lighting is provided by large crystalline balls set into the cavern walls and ceiling. A second entry to the city is found in stairs leading up to the basement of the Coptic Church in old Cairo (Babylon). Drawing from narratives of people "living in the Earth" given in the books of Genesis, Jasher and Enoch, it is possible that the city was originally called Gegal.

Film footage of the expedition was shot and a documentary called *Chambers of the Deep* was made and subsequently shown to private audiences. It was originally intended to release the footage to the general public, but for some reason it was withheld.

A multi-faceted spherical crystalline object the size of a baseball was brought up from the city, and its supernatural nature was demonstrated at a recent conference in Australia. Deep within the solid object are various hieroglyphs that slowly turn over like pages of a book when mentally requested to do so by whoever holds the object. That remarkable item revealed an unknown form of technology and was recently sent to NASA in the USA for analysis.

Historical documents recorded that, during the 20th century, staggering discoveries not spoken of today were made at Giza and Mt Sinai, and Egyptian rumours of the discovery of another underground city within a 28-mile radius of the Great Pyramid abound. In 1964, more than 30 enormous, multilevelled subsurface cities were discovered in the old Turkish kingdom of Cappadocia. One city alone contained huge caverns, rooms and hallways that archaeologists estimated supported as many as 2,000 households, providing living facilities for 8,000 to 10,000 people. Their very existence constitutes evidence that many such subterranean worlds lie waiting to be found below the surface of the Earth.

Excavations at Giza have revealed underground subways, temples, sarcophagi and one interconnected subterranean city, and validation that underground passageways connected the Sphinx to the Pyramids is another step towards proving that the whole complex is carefully and specifically thought out.

OFFICIAL DENIALS

Because of Dr Selim Hassan's excavations and modern space surveillance techniques, the records and traditions of the ancient Egyptian mystery schools that claim to preserve secret knowledge of the Giza Plateau all rose to the highest degree of acceptability. However, one of the most puzzling aspects of the discovery of underground facilities at Giza is the repeated denial of their existence by Egyptian authorities and academic institutions. So persistent are their refutations that the claims of mystery schools were doubted by the public and suspected of being fabricated in order to mystify visitors to Egypt. The scholastic attitude is typified by a Harvard University public statement in 1972:

No one should pay any attention to the preposterous claims in regard to the interior of the Great Pyramid or the presumed passageways and unexcavated temples and halls beneath the sand in the Pyramid district made by those who are associated with the so-called secret cults or mystery societies of Egypt and the Orient. These things exist only in the minds of those who seek to attract the seekers for mystery, and the more we deny the existence of these things, the more the public is led to suspect that we are deliberately trying to hide that which constitutes one of the great secrets of Egypt. It is better for us to ignore all of these claims than merely deny them. All of our excavations in the territory of the Pyramid have failed to reveal any underground passageways or halls, temples, grottos, or anything of the kind except the one temple adjoining the Sphinx.

It was well enough for scholarly opinion to make such a statement on the subject, but in preceding years, official claims were made stating that there was no temple adjoining the Sphinx. The assertion that every inch of the territory around the Sphinx and pyramids had been explored deeply and thoroughly was disproved when the temple

adjoining the Sphinx was discovered in the sand and eventually opened to the public. On matters outside official policy, there appears to be a hidden level of censorship in operation, one designed to protect both Eastern and Western religions.

EVER-BURNING LAMPS

In spite of amazing discoveries, the stark truth is that the early history of Egypt remains largely unknown and therefore unmapped territory. It is not possible, then, to say precisely how miles of underground passageways and chambers beneath the Giza Plateau were lit, but one thing is for sure: unless the ancients could see in the dark, the vast subterranean areas were somehow illuminated. The same question is addressed of the interior of the Great Pyramid, and Egyptologists have agreed that flaming torches were not used, for ceilings had not been blackened with residual smoke.

From what is currently known about subsurface passageways under the Pyramid Plateau, it is possible to determine that there are at least three miles of passageways 10 to 12 storeys below

Its secret location was recently revealed to a select group of people who were given permission to explore and film the city.

It exists in a huge natural cavern system below the Giza Plateau that extends out in an easterly direction under Cairo.

ground level. Both the *Book of the Dead* and the Pyramid Texts make striking references to "The Light-makers", and that extraordinary description may have referred to a body of people responsible for lighting the subterranean areas of their complexes.

Iamblichus recorded a fascinating account that was found on a very ancient Egyptian papyrus held in a mosque in Cairo. It was part of a 100 BC story by an unknown author about a group of people who gained entry to underground chambers around Giza for exploratory purposes. They described their experience:

We came to a chamber. When we entered, it became automatically illuminated by light from a tube being the height of one man's hand [approx. 6 inches or 15.24 cm] and thin, standing vertically in the corner. As we approached the tube, it shone brighter...the slaves were scared and ran away in the direction from which we had come! When I touched it, it went out. We made every effort to get the tube to glow again, but it would no longer provide light. In some chambers the light tubes worked and in others they did not. We broke open one of the tubes and it bled beads of silver-coloured liquid that ran fastly around the floor until they disappeared between the cracks [mercury?].

As time went on, the light tubes gradually began to fail and the priests removed them and stored them in an underground vault they specially built southeast of the plateau. It was their belief that the light tubes were created by their beloved Imhotep, who would some day return to make them work once again.

It was common practice among early Egyptians to seal lighted lamps in the sepulchres of their dead as offerings to their god or for the deceased to find their way to the "other side". Among the tombs near Memphis (and in the Brahmin temples of India), lights were found operating in sealed chambers and vessels, but sudden exposure to air extinguished them or caused their fuel to evaporate.⁶

Greeks and Romans later followed the custom, and the tradition became generally established—not only that of actual burning lamps, but miniature reproductions made in terracotta were buried with the dead. Some lamps were enclosed in circular vessels for protection, and instances are recorded where the original oil was found perfectly preserved in them after more than 2,000 years. There is ample proof from eyewitnesses that lamps were burning when the sepulchres were sealed, and it was declared by later bystanders that they were still burning when the vaults were opened hundreds of years later.

The possibility of preparing a fuel that would renew itself as rapidly as it was consumed was a source of considerable controversy among mediaeval authors, and numerous documents exist outlining their arguments. After due consideration of evidence at hand, it seemed well within the range of possibility that ancient Egyptian priest-chemists manufactured lamps that burned if not indefinitely then at least for considerable periods of time.

Numerous authorities have written on the subject of ever-burning lamps, with W. Wynn Westcott estimating that the number of writers who have given the subject consideration as more than

150 and H. P. Blavatsky as 173. While conclusions reached by different authors are at a variance, a majority admitted the existence of the phenomenal lamps. Only a few maintained that the lamps would burn forever, but many were willing to concede that they might remain alight for several centuries without replenishment of fuel.

It was generally believed that the wicks of those perpetual lamps were made of braided or woven asbestos, called by early alchemists "salamander's wool". The fuel appeared to have been one of the products of alchemical research, possibly produced in the temple on Mt Sinai. Several formulae for making fuel for the lamps were preserved, and in H. P. Blavatsky's profound work, *Isis Unveiled*, the author reprinted two complicated formulae from earlier authors of a fuel that "when made and lighted, will burn with a perpetual flame and you may set this lamp in any place where you please".

Some believe the fabled perpetual lamps of temples to be cunning mechanical contrivances, and some quite humorous explanations have been extended.

In Egypt, rich underground deposits of asphalt and petroleum exist, and some would have it that priests connected asbestos wicks by a secret duct to an oil deposit, which in turn connected to one or more lamps. Others thought that the belief that lamps burned indefinitely in tombs was the result of the fact that in some cases fumes resembling smoke poured forth from the entrances of newly opened vaults. Parties going in later, and discovering lamps scattered about the floor, assumed that they were the source of the fumes. There were some well-documented stories concerning the discovery of ever-burning lamps not only in Egypt but also in other parts of the world.

De Montfaucon de Villars gave this fascinating account of the opening of the vault of Rosicrucian Christian Rosenkreuz. When the Brethren entered the tomb of their illustrious founder 120 years after his death, they found a perpetual lamp brightly shining in a suspended manner from the ceiling. "There was a

statue in armour [a robot] which destroyed the source of light when the chamber was opened."⁷ That is strangely similar to the accounts of Arab historians who claimed that automatons guarded galleries under the Great Pyramid.

A 17th-century account recorded another story about a robot. In central England, a curious tomb was found containing an automaton that moved when an intruder stepped upon certain stones in the floor of the vault. At that time, the Rosicrucian controversy was at its height, so it was decided that the tomb was that of a Rosicrucian initiate. A countryman discovered the tomb, entered and found the interior brilliantly lit by a lamp hanging from the ceiling. As he walked toward the light, his weight depressed the floor stones and, at once, a seated figure in heavy armour began to move. Mechanically it rose to its feet and struck the lamp with an iron baton, destroying it and thus effectively preventing the discovery of the secret substance that maintained the flame. How long the lamp had burned was unknown, but the report said that it had been for a considerable number of years.

There were some well-documented stories concerning the discovery of ever-burning lamps not only in Egypt but also in other parts of the world.

THE DAILY TELEGRAPH.
MONDAY, MARCH 4, 1935

**SUBWAY FOUND
BELOW
THE PYRAMIDS
NEW DISCOVERIES
IN EGYPT
COLONNADED HALL
IN ROCK
2,500 YEARS' OLD
CHAMBERS**

FROM OUR OWN CORRESPONDENT
CAIRO, Sunday.

A subway connecting Khephren's Pyramid City to Cheops' Pyramid City has been discovered in the course of recent excavations. This had been cut through the living rock.

More remarkable still, a shaft, 11 yards long, was found to lead from the subway to the heart of the rock. When examined, it was found to end in a chamber some 6 yards by 11 yards.

From one side of it there was a

This is how the *Daily Telegraph* reported the discovery of underground chambers at Giza in 1935 (*passim*).

Sunday Express

Founded by
LORD BEAVERBROOK

LONDON, JULY 7, 1935

CITY OF THE WORLD'S FIRST QUEEN THE MYSTERY OF THE PYRAMIDS

MAY BE SOLVED BY NEW EXCAVATIONS

Mr. Edward Armytage, etymologist, and explorer of New Guinea and the South Seas, has just returned to England from Egypt, where he has been watching the excavating of a secret city which existed 4,000 years ago.

Below he describes what is happening.

By EDWARD ARMYTAGE, F.R.E.S.

A CITY, the existence of which had not even been suspected, has been discovered in Egypt. The discovery promises to throw new light on a highly organised civilisation that existed 4,000 years ago.

And it may provide the key to the mystery of how the Pyramids were built.

The city was discovered by accident.

For years Egyptian archaeologists have ignored an incomplete pyramid near the better-known Pyramids. They regarded it as nothing but a mound of debris.

Then Professor Selim Hassan,

the Egyptian excavator, declared that it was undoubtedly the tomb of a ruler. His opinion has been justified.

Not only has the mound proved to be the tomb of a queen who reigned 4,000 years ago, but close by has been unearthed the remains of a wonderful city. The city had a perfect drainage system and other amenities which were not introduced into Egypt until 300 years ago!

This is how the unearthing of a lost city was reported in one of many papers, the *Sunday Express* of 7 July 1935. The world hears of the discovery of a "secret" Egyptian city (*passim*).

About the Author:

Tony Bushby, an Australian, became a highly successful businessman and entrepreneur very early in his life. He established a magazine publishing business and spent 20 years researching, writing and publishing his own magazines, primarily for the Australian and New Zealand markets.

With strong spiritual beliefs and an interest in metaphysical subjects, Tony has developed long relationships with many associations and societies throughout the world. He has been given access to rare biblical manuscripts in the archives of numerous private libraries and museums. His book, *The Bible Fraud* (see review in NEXUS 8/06, and extract in NEXUS 9/01-03), involved him in 12 years of full-time,

painstaking research at great personal expense. His extensive travels have taken him to Egypt, the Middle East, England, Wales, Scotland, France, Germany, Belgium, Italy, Australia, New Zealand and the USA. His follow-up book, and *The Secret in the Bible*, was published in late 2003 (see review in 11/02). He is currently abroad, preparing further manuscripts to follow these books.

As Tony Bushby vigorously protects his privacy, any correspondence should be sent to him care of Joshua Books, PO Box 5149, Maroochydore BC, Qld 4558, Australia, tel +61 (0)7 5444 1971, fax +61 (0)7 5444 1491.

Copies of *The Bible Fraud* and *The Secret in the Bible* are available from NEXUS offices and the Joshua Books

website <http://www.joshuabooks.com>.

Endnotes

1. Professor Gaston Maspero, *The Dawn of Civilisation*, 1901, p. 517
2. *Histoire de la Magie*; based in part upon the authority of Iamblichus, from *On the Mysteries, particularly those of the Egyptians, Chaldeans and the Assyrians*
3. *Ammiani Marcellini Rerum Gestarum Libri*, Leipzig, 1875
4. *The Sydney Morning Herald*, 11 October 1994
5. Dr Selim Hassan
6. *Fame and Confession of Rosie-Cross*, trans. Thomas Vaughan, 1625
7. Montfaucon de Villars, *The Diverting History of the Count of de Gabalis*, 1714

OUT-OF-BODY EXPERIENCE

A Powerful Tool for Self-Research

Out-of-body experiences are common to all humanity, but producing them at will and remaining lucid whilst outside the body requires ideal physical conditions as well as strong desire, concentration and determination.

by Sandie Gustus © 2004

Director
Marketing & Communications – UK
International Academy of
Consciousness
London, UK
Tel/fax: +44 (0)20 7723 0544
Email: London@iacworld.org
Website: <http://www.iacworld.org>

Decades ago, the limitations of communications infrastructures provided something of a buffer between impactful world events and our sensibilities. Today, however, exposed as we are to real-time broadcasts, mass media and multi-media, more and more of us are finding it difficult to avoid reflecting upon the merit of our existence, the level of maturity of humankind and, as a natural consequence, the theme of evolution.

Fortunately, advances in sciences have enabled us to make sense of certain elements of our existence. Recent breakthroughs in technology and communication are doing so much to improve our levels of education and discernment that our questions about existence and evolution are becoming more precise and challenging. However, science, for all its sophistication, remains unable to provide us with a verifiable explanation of what happens to us after we die, for example.

Religion has traditionally played an important role in addressing enigmas such as these, and until quite recently religious perspectives were widely accepted, contributing much to the alleviation of our anxieties about death and the afterlife. But as our levels of knowledge and acumen increase, we are becoming less willing to accept unchallengeable "absolute" truths and mystical interpretations.

As a result, people all over the world are now searching for more precise, logical and personally confirmable answers to the age-old existential questions such as: "Where did I come from?", "Where will I go when I die?", "What is it like there?", "Who else will be there?" and "What is the purpose of my life?"

In response to this growing demand, a veritable plethora of "routes to enlightenment" has sprung up in the marketplace. Some of these are espoused through cleverly marketed products such as lectures, workshops, books and videos, the international commercial successes of which attest to a worldwide demand of massive proportions. Many of these methods, philosophies, theories and practices, however, exact a degree of faith on behalf of the individual and cannot be authenticated by objective means.

With so many alternatives on offer, we've almost reached the point where we need a course on what course to take. So how do we discriminate what has value from what has not? How can we really know what the *relative truth is*? And is it enough simply to believe in something because someone else does, because it appears to make sense or because it gives us a warm fuzzy feeling inside?

For the time being, science, through its conventional paradigm, has limitations and has developed no means by which to answer these questions or those mentioned earlier, as it is unable to confirm the existence of life in other dimensions.

In search for better means to achieve substantiated and verifiable answers, some scientists are looking into the *out-of-body experience* (OOBE), documented throughout history since ancient Egypt, as an effective tool for allowing personal verification of what lies beyond that which we can perceive with our physical senses.

By employing a more updated ontological model and scientific paradigm for research, scientists can investigate the existence of nonphysical dimensions, employing a variety of methods that include the analysis of detailed, consensual information from accounts of personal experiences of lucid OOBEs. Experimental research conducted by a number of scientific organisations further corroborates the reality of the OOBE phenomenon.

In light of this knowledge, the objective of this article is to detail further why the OOBE is such an important tool, underscore that the OOBE is a universal phenomenon well within the capabilities of every human being, explain some facts about the OOBE based on decades

of accumulated research, and demonstrate why we cannot afford to keep thinking of this natural, universal, long-acknowledged phenomenon as odd or extreme.

All readers are encouraged, however, *not* to believe in anything they read here but to experiment, have their own experiences and confirm for themselves the leading-edge relative truth expressed in this article.

History of the out-of-body experience

The out-of-body experience, also commonly known as the *OOBE* or *astral travel*, is as natural as sleeping and breathing. During OOBEs, the consciousness (oneself, one's soul or spirit) acts independently of the physical body in a nonphysical (or extraphysical) dimension. Sometimes this is experienced with some awareness of what is actually occurring, but usually this is not the case—meaning that the individual also has no recall of the experience.

References to the OOBE are evidenced throughout human history. Across cultures, socioeconomic strata, genders, languages, nationalities, religions, civilisations and the ages, from the most ancient tribal societies to the modern societies of the 21st century, human beings have recorded the departure and subsequent return of a subtle body from the physical body with a remarkably high degree of consistency in describing the many different characteristics of the phenomenon.

Early evidence of the OOBE appeared in ancient Egypt between 3,000 and 5,000 years ago. The Egyptian priests were aware of the existence of the astral body; they called it the *Ka*. References to the OOBE later appeared in ancient Greece through the writings of a number of philosophers including Plato and Herodotus. Cases of conscious projections are also well documented in the Bible, for example in Ezekiel III:14; the Apocalypse of John 1:10–11 and 4:2; and in the Epistles of Paul of Tarsus, e.g., II Corinthians 12:2.

During the Middle Ages, due to the repressive influence of the Inquisition, the OOBE was studied and practised in secret within esoteric and occult movements. Information gathered was not made available to the general population. This need for secrecy contributed to the fabrication of various myths and untruths about the dangers of astral travel that persist today.

In the 18th and 19th centuries, a number of pioneers in this field of study had a great impact on society with the publishing of various works. Chief among them were the Swedish philosopher Emanuel Swedenborg, the French novelist Honoré de Balzac, with

his (autobiographical) novel *Louis Lambert*, and the creator of spiritism, Frenchman Allan Kardec.

Other key figures who made significant contributions towards giving some credibility to the OOBE as a real event were Apollonius of Tyana, Antonio of Padua and Padre Pío.

The subtle bodies

From this historical perspective, the most telling conclusion to be drawn from studies and personal accounts of the OOBE is that human beings are more than just their physical bodies. When one experiences a lucid OOBE, one has irrefutable evidence that the physical body is merely a temporary "house" through which one's consciousness or awareness manifests in the physical dimension.

For what occurs during the OOBE (which usually takes place when the physical body is either in an altered state of consciousness or asleep) is a separation of the nonphysical (or extraphysical) body from the physical body. If the individual has awareness during the experience, he sees that his self-awareness resides in the extraphysical body, not in the physical body. The most concrete personal evidence of this is when an individual gains lucidity outside the body and witnesses his physical body sleeping on the bed. This commonly occurs during the near-death experience (NDE), when the departure of the extraphysical body is forced through the critical physical condition of the individual. Thousands of documented reports of accident victims and cardiac arrest patients, among others, attest to this phenomenon known as *self-bilocation*.

Similarly, it is widely reported and acknowledged that the extraphysical body is connected to the physical body by a retractable energy field, known as the *silver cord*. The silver cord acts like a set of reins on the extraphysical body, preventing it from getting lost in extraphysical realms or failing to return to the physical body. The silver cord acts as an energetic intermediary between the two vehicles of manifestation (the physical and the extraphysical bodies) and is broken only at the time of biological death, at which point the extraphysical body (housing the consciousness) departs to begin a new period between physical lives (the intermissive period).

The silver cord is sometimes referred to as one's *bioenergy* or *energetic body* (as it is known when the individual is in the physical waking state). In fact, this energetic body is the connection point through which the fields of energy generated by the *chakras* inside the human body flow back and forth to the nonphysical body.

This constant (usually unconscious) exchange of energy is responsible for maintaining the necessary functioning of the body and for keeping it alive, both when the individual is in the waking state and when he or she is outside the body. This energetic connection similarly enables the nonphysical body to travel far from the physical base.

Bioenergy: a key component of OOBEs

Bioenergy is one of many terms used to describe the field of energy that emanates from and encompasses every living being. It is also known as *vital energy*, *chi*, *aura*, *prana* and *life force*. A natural element, bioenergy is present in all human processes and interactions. What most people don't realise is that it's also a significant resource that is within our capacity to control.

There are innumerable benefits to



mastering one's own bioenergies. In the context of the OOBE, the control of bioenergies is a key component in producing OOBES, is responsible for the level of lucidity we are able to acquire outside the physical body, and is the resource that enables us to carry out tasks and maintain balance in the extraphysical dimension.

OOBE, or an altered state of consciousness?

With the silver cord ensuring a constant connection between the physical and extraphysical bodies, it is possible to have a rich variety of lucid experiences outside the body. We can travel in the physical realm or visit other dimensions, meet old friends and make new acquaintances, exercise our will and take decisions. But how can we be so sure that what we experience is *real*, and not a dream or some other altered state of consciousness provoked by any number of things such as fainting, exhaustion, fever, medicines, hormones or drugs?

Some of the characteristics of the conscious OOBE that clearly distinguish it from a dream or hallucination include the following:

- Individuals are lucid, active participants of OOBES, taking decisions and using their mental attributes, whilst in dreams they remain passive, having no control over the dream experience;
- Environments and situations encountered during a projection are real, whilst in dreams they may be distorted or nonsensical;
- Situations encountered in projections occur independently of the individual's capacity for creativity and imagination;
- Projections are more difficult to recollect than dreams, as the experience occurs beyond, and is not recorded by, the physical brain;
- Projectors can see their physical body and even touch it; dreams occur inside the physical body;
- Projectors experience a sense of liberty, well-being, expanded awareness and sometimes euphoria at being able to fly and pass through physical objects; dreams provide more mundane feelings and experiences;
- Projectors often perceive the departure and/or return of their extraphysical body from the physical body; this does not occur in dreams.

Sensations in the process of leaving the body

To contribute to the understanding of OOBES, we can, for example, look at some of the sensations associated with the process of departing the physical body.

Data collected from students' descriptions of their sensations in experiments held during the practical sessions of the courses on OOBES (offered around the world by the International Academy of Consciousness, formerly known as the International Institute of Projectiology and Conscientiology) suggest that some of the common sensations usually experienced in relation to either leaving or returning to the physical body are: falling, floating and repercussions, e.g., myoclonus (jerking limbs), jerking awake, projective catalepsy (a sleep paralysis type of sensation), sinking, torpidity (numbness), intracranial sounds (a sound that seems to be coming from inside the head), tingling, clairvoyance, oscillation (a type of rocking or swaying sensation), vibrations and serenity. Other experiences reported by the students included the perception of extraphysical beings, sensations such as itching, chills, change of

temperature, pressure in the body, tears (watering of eyes) as well as clairvoyance and the tunnel effect. Respondents also reported experiencing a variety of less-common sensations such as spinning, waves passing through the body, pulsation, swelling, being lifted, dizziness, elongation, dematerialisation and bubbling.

Current and historical research on OOBES

Personal experimentation is the most logical method for validation of these sensations, and researchers are largely reliant on the accumulation of data relating to personal accounts in seeking to identify the elements common to these experiences. For this reason, survey research has often been used in the study of the OOBE. One of the first recorded was conducted in the UK in 1890 by the British Society of Psychical Research.

More than 100 years later, in 1999, a sophisticated online survey analysing 98 different aspects of the OOBE was launched via the Internet by the International Academy of Consciousness [see NEXUS 6/05]. To date, over 7,000 Internet users have responded. The IAC researchers Wagner Alegretti and Nanci Trivellato

acknowledge that the survey participants are not representative of the general population as they are all Internet users and most had some pre-existing interest in studies of the paranormal. Nevertheless, the results show that many different characteristics of the phenomena associated with the OOBE are shared by people around the world, irrespective of their age, gender, nationality, ethnicity, cultural background, religion, level of education or socio-economic status. This is a significant outcome that further confirms the value of pursuing such investigations. (This survey may be accessed at

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<http://www.iacworld.org>.)

The sensations mentioned previously are corroborated by the preliminary results of the IAC online survey, which reveal that, of the first 1,185 people who responded to this survey in 1999, 1,007 reported experiencing some of these sensations.

Other historical surveys of interest include a study conducted by Celia Elizabeth Green. In 1967, she asked 380 students at Oxford University if they had had any experiences in which they felt themselves to be outside their body. Thirty-four per cent of the students replied affirmatively.

In addition, much experimental research has been conducted by a number of scientists. In 1972, for example, Janet Lee Mitchell, a researcher at the American Society for Psychical Research in New York, USA, carried out a number of experiments aimed at furthering knowledge of vision whilst outside the body. The research subject was Ingo Swann, a known clairvoyant and surrealist painter. During the experiments, different target objects were hidden on a platform suspended 3.5 metres above the floor of the room. After "projecting" his vision, Swann described the objects he saw both verbally and with illustrations. An independent judge correctly matched eight of Swann's drawings with the eight target objects used in the experiment. Such satisfactory results were highly improbable and attest to the "travelling" nature of Swann's viewing.

The following year, Karlis Osis, a parapsychologist, sent an open invitation throughout the United States to all individuals capable of projecting at will, to project themselves out of body and into the premises of the American Society for Psychical Research in New York. One hundred people were selected from the large number

that volunteered. Four target objects were placed at a predetermined location within the building. Although the experiment didn't achieve total success, 15 per cent of the participants produced clear evidence of having visited the office through extraphysical means.

In 1979, in partnership with Donna L. McCormick and again at the American Society for Psychical Research in New York, Karlis Osis tested the kinetic effects of the projected consciousness. The team developed a means of measuring the presence of the extraphysical body of the projector (Alexander Tanous, in this experiment) through a system of sensors placed inside a sealed chamber. In addition, the projector was to attempt to perceive figures that were randomly produced by a specially designed optical system inside the chamber. Of the 197 attempts made by Tanous, 114 hits and 83 misses were made during 20 sessions. Every time that Tanous was able to describe correctly the figure selected and shown, the sensors detected the presence of something inside the shielded chamber.

Currently, an experimental research project entitled Projective Field is being conducted by the aforementioned IAC researchers. The experiment is aimed at understanding the processes by which an individual captures information through the OOBEE and remote viewing. The main purpose of the experiment is to investigate both the apprehension of the information via nonphysical means and the subsequent transfer of this information to the physical brain.

Five batteries of well-designed experiments have already been conducted in Spain, Portugal, the United States and the United Kingdom. External auditors and judges participated in all experiments to attest to the validity of the scientific methodology. Intriguing preliminary results presented at the Third International Congress of Projectiology and Conscientiology at the New York School of Medicine in 2002 showed that, of the 105 participants, 52 reported 93 instances of the OOBEE. The results presented also suggested that shapes of objects, followed by colours, are most easily perceived when outside the body.

The OOBEE and its applications

Whilst it is important that the sensations associated with the OOBEE along with myriad other related phenomena are studied, identified and understood, it is essential that they be examined as part of a larger context that properly acknowledges the value of the experience.

What precisely, then, is the value of the OOBEE? The real purpose of the OOBEE is to precipitate major personal evolution by providing individuals with opportunities to perceive first-hand the invisible, yet real, nonphysical dimensions with which they interact all the time. A tool for self-research, the OOBEE enables people to know who they really are—that is, they're not just the physical body but a consciousness in evolution.

During OOBEEs, as the consciousness leaves the physical brain and manifests in the brain of the extraphysical body (where the memory of one's previous lives resides) there is an increased probability of recalling past lives and, therefore, of furthering our understanding of evolution, the process of physical birth and death and the cycle of successive lives.

It's also logical to reason that the acknowledgement that we do not die brings with it a complexity of consideration relating to: past

and present relationships and possible interconnections between the two; pathologies that have manifested over previous lives in addition to the current life; the period between lives; our multidimensional curriculum; and our purpose or task in this physical life.

Where do we go when we leave the body?

A consensus of opinion derived from conscious projectors and researchers who have recorded their experiences throughout history has provided much information about the nonphysical dimension. Anyone who is interested to verify this information may do so by having lucid OOBEEs.

Whilst there is only one physical dimension, the extraphysical dimension is multi-layered, consisting of many planes or dimensions. This makes the OOBEE an extremely rich, educational and interesting experience. However, the majority of people, when they leave their bodies, remain in the dimensional layer closest to the physical dimension (Earth's crust).

Typically, a particular dimension is inhabited by consciousnesses who share affinities in terms of the quality of their energies, intentions, thoughts and sentiments. For example, there are dimensions populated by those who lack awareness of the fact that they are no longer alive in the biological sense.

Other dimensions, by contrast, are inhabited by advanced societies, communities of evolved consciousnesses who are fully aware of the ongoing cycle of successive lives. These consciousnesses plan their next physical life according to objectives that include assisting humankind, evolving further and assisting others with their evolution.

Mechanisms that facilitate and inhibit projective ability

Although every human being experiences some degree of separation of the extraphysical body from the physical body every night while sleeping, the big challenge lies in being able to

achieve enough lucidity whilst out of the body to be able to be certain of what is happening and to control the experience. This would consequently assist in the recall of the experience once back in the physical body.

Fortunately, however, a number of mechanisms that facilitate lucid OOBEEs have been identified. These include basic, practical considerations such as wearing loose clothing and lying in the dorsal position. The room should be dark, quiet, totally private, climatically controlled and free of interferences. Concentration on a target or (ethical) objective of the OOBEE will also facilitate the process. The individual will also benefit from being relaxed, well rested, in a state of emotional equilibrium, motivated, confident of achieving success and without fear or doubt about the experience.

Other factors are similarly known to inhibit OOBEEs or diminish their quality. The following are some activities that should be avoided prior to attempting leaving the body: watching films or reading books that are either exciting or violent in nature, engaging in conflict with others, thinking negative thoughts, drinking or using any type of drug, or indulging negative emotions of any variety, especially fear.

The practitioner should also take care of physiological needs prior to trying to have an OOBEE, as a full stomach or bladder, for example, will make it difficult to be comfortable and forget the physical body—a prerequisite for having an OOBEE.

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In the same way, factors and techniques that facilitate the recall of the period spent outside the human body have been identified. For example, applying oneself to the improvement of one's will and memory and to one's capacity for attention and concentration can all contribute to the recollection of the extraphysical experiences.

As it is easier to provoke an OOBEx from some altered states of consciousness than from the ordinary physical waking state, then those interested in producing lucid OOBExs should take advantage whilst experiencing such a condition (if positive or sound) such as: physical tiredness, lucid dreaming, the hypnogogic (alpha) state or deep relaxation.

However, the most important qualities, essential to producing lucid OOBExs, are *strong desire, mental concentration and determination*. The effectiveness of these personal qualities should not be underestimated.

Beyond these, there exist countless other techniques for provoking lucid OOBExs. One of the most comprehensive lists, describing 37 techniques in detail, can be found in a book entitled *Projectology*, by Waldo Vieira, MD.

The degree of success of one technique over another is purely personal, so practice and trial and error will determine which techniques work best for each individual.

Levels of lucidity experienced outside the body

Considering that every human being without exception can temporarily project the consciousness from the physical body, and that this seems as natural a process as breathing and sleeping, then why is it that practically 99 per cent of humans do not remember having any extraphysical experiences?

The answer to this is simple. It's because the majority of people leave their bodies with no lucidity or awareness at all. Many factors, common to the average person, prompt this condition. These include: a lack of interest in everything that is nonphysical; an all-consuming fixation on all things physical; an inability, through ignorance, to distinguish the experience outside the body from a dream of no consequence; and scientific and/or religious conditioning.

But this is not an all-or-nothing scenario. Individuals can experience different levels of awareness outside the body. In a state of semi-awareness, for example, the individual will typically be confused as to his condition and be open to interference from dreamlike images or nightmares.

On a scale of 0–100% of extraphysical lucidity, it is at a level of about 60% that the projected individual gains certainty as to his extraphysical state.

During a lucid out-of-body experience, the individual is able to access and employ all of the capacities he enjoys in the waking state, such as memory, rationality, decision-making and critical judgement.

Types of out-of-body experiences

There are innumerable types of OOBExs. These vary according to the way in which they occur, in their nature and in their purpose. For example, the most common type of out-of-body experience is the "spontaneous" (or accidental) experience, in which the projector did not intend to leave the body (and often does not even know about the phenomenon). By contrast, an intentional OOBEx is one that has been purposefully provoked by the application of a projective technique.

Among the many other types of OOBExs, we can also cite the "confirmed" experience, which is when the individual attains enough lucidity outside the body to perform a practical task that enables him to confirm his extraphysical state; for example, seeing something in the physical dimension that can be confirmed later. It is this type of experience that allows scientists to conduct experimental research on the OOBEx phenomenon.

Another very common type of experience is the "leisure" OOBEx that is typified by feelings of liberty and well-being and often includes extraphysical flights.

Some also claim to have had experiences in which they encountered a friend, family member or other acquaintance who has passed away. Others have had encounters with friends who were also conscious outside their bodies and were able to communicate with them during the experience.

One of the most interesting types of OOBExs, however, is the continuously conscious OOBEx, during which the individual maintains awareness through all stages of the experience; in other words, during the period of their normal waking state, their relaxation, the separation

of the nonphysical body, the period spent outside the body, the return of the extraphysical body to the physical body and, finally, the return to normal waking state (waking up upon returning).

Projective phenomena

Paranormal phenomena are very much a part of our ordinary physical day-to-day lives. We may benefit from a series of synchronicities—for example, receive a signal that we feel compelled to act upon in some way, or play the role of a (secondary) messenger to someone we know, passing them a message that we don't understand but that has clear implications for them. Yet without a perspective that includes extraphysical dimensions and beings, we assign the resulting fortune (good or otherwise) to chance, luck or fate, failing to recognise that we are in fact experiencing a paranormal phenomenon such as clairvoyance, clairaudience, channelling or intuition.

This is another reason why research, both personal and formal, is important, as it allows us to identify and study nonphysical dimensions and beings and therefore better understand the true nature of our reality.

The nonphysical dimension, however, is so different to the



physical, material existence to which we are accustomed that during conscious OOBEs we are exposed to conditions that are totally outside our usual frame of reference. For example, when manifesting outside the body, we can fly, we can have 360-degree vision, and in some cases we can do things such as exit the Earth's atmosphere at astonishing speeds.

Similarly, when the extraphysical body is in a state of nonalignment with the physical body (as is the case in either a partial or full projection), a whole range of psychic phenomena and perceptions can occur that fall well outside our regular perception of life.

The ability of individuals to experience such phenomena is a normal condition of the consciousness when projected from the physical body with a high level of awareness, and operates independently of the level of the individual's psychic capacities in the normal physical waking state.

Some examples of projective phenomena include:

- **Self-bilocation** – in which the person perceives himself to be in two places at once. A common example of this, as previously mentioned, is when the individual can see his or her (motionless) physical body whilst manifesting in the extraphysical body.

- **Self-permeability** – in which the projected individual is able to move through physical objects.

- **Internal autoscapy** – in which the individual has an internal view of his own body, and can see his own bones and organs either with the consciousness inside the brain or outside the physical body.

- **Cosmoconsciousness** – a state of highly expanded awareness, in which the individual perceives the order, balance and logic of the universe, simultaneously feeling and celebrating that he or she is a part of it and at one with it. This condition is known by many other names in various fields and religions, including *nirvana* (Buddhism), *satori* (Zen Buddhism) and *samadhi* (Yoga).

- **Precognition** – in which the individual, fully projected from the physical body, obtains information relating to events that have not yet occurred.

- **Retrocognition** – in which the individual, fully projected from the physical body, obtains information relating to events that have already occurred, most commonly about him or herself from this life or previous lives.

- **Extraphysical telepathy** – in which the projected individual communicates with others who are in the physical, projected or nonphysical condition through the transmission of thought.

Interaction between physical and nonphysical worlds

The out-of-body experience provides us with an insight into and allows us to understand better how the physical and nonphysical dimensions interact. Thus it is a valuable evolutionary and self-research tool. Knowledge of the mechanism of interaction between these dimensions helps to explain some things in our lives that we would otherwise not be able to explain without resorting to beliefs.

Some examples of phenomena not explained by conventional scientific knowledge today include: the instinctive but certain knowledge that an unseen force is helping us at critical moments in our lives; certain life-changing inspirations and intuitions; perplexing synchronicities; and the sudden (and apparently inexplicable) onset of various moods and emotions.

The theory of the existence of an interrelation between the physical and extraphysical dimensions also explains many documented phenomena such as poltergeists, "material" apparitions of deceased persons who perform a rescue or communicate vital information, and the perceived presence of a relative who has passed away in his or her former home, to name a few.

In the same way that we have relationships and interactions with other physical beings, be they family, friends, work colleagues, acquaintances or strangers, we also have relationships and interactions with extraphysical beings every day. By working at developing awareness of these beings, the nature of our connections to them and their actions and influences upon us, we can have a better understanding of them and we can use this understanding to exert a greater level of control over our lives.

Cosmoethical extraphysical beings—individuals of a heightened level of awareness, whose intentions for us are constructive in an evolutionary way—are known by many different names including helpers, spirit guides, guardian angels, (nonphysical) masters, mentors and protectors. Unfortunately, many of these expressions have a mystical or religious connotation attached to these beings, when there is nothing mystical or religious about them. They are individuals like us, expressing a high level of maturity and lucidity during their period between lives. They are still evolving, and as

part of their evolution they will have future physical lives. These beings specialise in providing assistance to individuals in need. Their work is characterised by their discretion, their level of ethics and their respect for the free will of all individuals. Their presence does not promote any type of guruship, as it generates an increase in our levels of lucidity, rationality and critical thinking.

Benefits of conscious projection

Throughout this article we have seen that the out-of-body experience is very rich in terms of the opportunities it provides for the individual to expand

his or her awareness and to evolve as a consciousness. It is worthwhile to summarise some additional comments on the key benefits of the OOBEE.

Through having lucid OOBEEs, individuals are provided with irrefutable personal evidence of life after death. They may even recall the plan of action (purpose) for this life that was established prior to being born, which can help them to reprioritise their lives. They may also recall past lives or periods between lives whilst lucid outside the body.

Regular lucid experiences outside the body have the effect of enhancing the individual's parapsychic abilities, extrasensory perceptions and sensitivity to energies and of promoting the development of energetic self-control and personal energetic defence capabilities. Equally, an accumulation of such experiences enables individuals to develop awareness of the nature of their energetic interactions with both physical and nonphysical beings, to offer assistance to needy beings through the transmission of therapeutic energies, to communicate directly with evolved extraphysical beings whose presence the great majority of people are not able to perceive, to expand their self-knowledge and to accelerate the process of personal maturation.

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THE TIME TRAVEL TALE OF JOHN TITOR

Although there is debate over the exact date it started, on 2 November 2000 a person calling himself "Timetravel_0", and later "John Titor", started posting on an Internet public forum that he was a time traveller from the year 2036.

One of the first things he did was post pictures of his time machine and its operations manual. As the weeks went by, more and more people began questioning him about why he was here, the physics of time travel and his thoughts about our time. He also posted on other forums including the old Art Bell website.

On 24 March 2001, John Titor revealed he would be leaving our time and returning to 2036. After that, he was never heard from again. Speculation and investigation about who John Titor was and why he was online continues to this day.

Although it may be easy to dismiss all this as science fiction, most people who read his posts agree that there is something very haunting about John Titor and what he said. In addition, and open to more debate, he also made a series of predictions and comments that eerily seem to be coming true.

As you read, please keep in mind that these posts were written before 9-11, the

Columbia space shuttle accident and the second Gulf War. Many people believe John may have known of these events and dropped clues without actually referring to them. It's also widely agreed that he made several predictions about future physics discoveries that have materialised as he stated.

A brief selection of some of the many questions and comments follows. The full postings have been collated and are available to all at the John Titor website, <http://www.johntitor.com>.

— Webmaster

John Titor: [In response to a barrage of questions] Although I do have personal reasons for being here and speaking with you, the most I could hope for is that you recognise the possibility of time travel as a reality. You are able to change your worldline for better or worse, just as I am. Although this will make me a far less interesting time traveller, these are the rules I personally try to hold to:

1. I will not disclose any information that will cause someone to gain personally by its knowledge. This means no stock or sports tips.

2. I will not disclose any detailed information that would allow someone to avoid death by probability. This means no earthquake or bomb information.

3. I will not disclose any information that may compromise any future actions by individual people or threaten their family and well-being. I will not disclose names or events associated with individuals.

Now for the physics. The grandfather paradox is impossible. In fact, all paradox is impossible. The Everett-Wheeler-Graham or multiple world theory is correct. All possible quantum states, events, possibilities and outcomes are real, eventual and occurring. The chances of everything happening some place at some time in the Superverse is 100 per cent. (For all you scientists out there, if Schrödinger's cat had a time machine, he might not be in the box at all.) Therefore, there is a worldline where you are alive, and another where you have gone back in time to kill your relative.

Differences between worldlines are measured from the perspective of the time traveller in terms of divergence percentage. The higher the divergence, the more "unlike" your destination worldline looks like compared to your worldline of origin.

Q: What are your memories of 2036?

A: It is difficult to describe 2036 in detail without spending a great deal of time explaining why things are so different.

In 2036, I live in central Florida with my family and I'm currently stationed at an army base in Tampa. A World War in

THE TWILIGHT ZONE

2015 killed nearly three billion people. The people that survived grew closer together. Life is centred on the family and then the community. I cannot imagine living even a few hundred miles away from my parents.

There is no large industrial complex creating masses of useless food and recreational items. Food is grown and sold locally. People spend much more time reading and talking together face to face. Religion is taken seriously and everyone can multiply and divide in their heads.

Life has changed so much over my lifetime that it's hard to pin down a "normal" day. When I was thirteen, I was a soldier. As a teenager, I helped my dad haul cargo. I went to college when I was thirty-one, and I was recruited to "time travel" shortly after that. Again, I suppose an average day in 2036 is like an average day on the farm.

There is a civil war in the United States that starts in 2004/5. That conflict flares up and down for 10 years. In 2015, Russia launches a nuclear strike against the major cities in the United States (which is the "other side" of the civil war from my perspective), China and Europe. The United States counterattacks. The US cities are destroyed, along with the AFE (American Federal Empire)...thus we (in the country) won. The European Union and China were also destroyed. Russia is now our largest trading partner and the Capitol of the US was moved to Omaha, Nebraska.

One of the biggest reasons why food production is localised is because the environment is affected with disease and radiation.

We are making huge strides in getting it cleaned up. Water is produced on a community level and we do eat meat that we raise ourselves.

After the war, early new communities gathered around the current universities. That's where the libraries were. I went to school at Fort UF, which is now called the University of Florida. Not too much is different, except the military is a large part of people's life and we spend a great deal of time in the fields and farms at the "university", or fort.

The Constitution was changed after the war. We have five Presidents that are voted in and out on different-term periods. The Vice-President is the President of the Senate and is voted for separately.

Q: Why is time travel used?

A: Right now, it's used to get information or "items" that would be helpful in getting a post-WWIII world back to a normal condition.

On my worldline, life is not easy. We live in a world recovering from years of war, poison, destruction and hate. All of it, courtesy of the thinking and actions of people that live right now in the same world you do, worrying about which stocks to buy or whether or not a stranger is lying to them on the Internet.

I believe that hardship and challenge develop character and community. My first experience with war came when I joined a shotgun infantry unit at the age of thirteen. In the four years I served as a "rebel", I watched hundreds of people get

shot, burned and bleed to death. I know exactly where I was and every detail of the exact moment the first nuclear warheads began falling on Jacksonville. I know the pain and regret of not acting soon enough to enjoy a relationship as a loved one dies of brain cancer from a war that gained nothing.

How can you possibly criticise me for any conflict that comes to you? [Responding to some flak in earlier posts. Ed.] I watch every day what you are doing as a society. While you sit by and watch your Constitution being torn away from you, you wilfully eat poisoned food, buy manufactured products no one needs and turn an uncaring eye away from millions of people suffering and dying all around you. Is this the "universal law" you subscribe to?

Perhaps I should let you all in on a little secret. No one likes you in the future. This time period is looked at as being full of lazy, self-centred, civically ignorant sheep. Perhaps you should be less concerned about me and more concerned about that.

Imagine you are Jewish and you are able to travel back in time to Germany in 1935. All around you are the patterns of thinking and action that will lead to a great deal of harm, death and destruction in just a few years. You have the advantage of knowing what will come, but no one will listen to you. In fact, they think you're insane and the situations you describe could never happen.

What I feel is not anger; it is sadness that you cannot see what I see.

Q: What event started the war? Can it be stopped?

A: The war is a result of faulty politics and desperation from Western leadership during the US civil war. Yes, I suppose you could stop it.

Q: Were biological or chemical weapons used in the war? Were any weapons used that affected people's minds?

A: Yes; there were biological and chemical weapons used. No mind control weapons, but there are new "non-lethal" weapon systems that turn out to be quite lethal.

Q: Are there social prejudices in 2036?

A: Yes there are. However, as odd as it may sound, it serves a useful purpose in my



time. First, you must realise that your experiences with "prejudice" and mine are different. I would characterise the intolerance you have here as a result of ignorance and fear. I have observed that people with unfounded and irrational fears about their fellow man in this time have the luxury of not having their beliefs tested.

After the war, much of the prejudice you have now was swept away by simple necessity. People had to work and fight together just to survive. This has a way of opening a person's eyes as to the value of fellow human beings.

What difference does the colour of a man's skin make when you are both fighting against the same enemy to survive or find water or grow food? On my worldline, if a man doesn't pull his weight in the community, then we feel prejudice towards him as a burden to us. This feeling of shame he experiences then makes him realise his responsibilities.

Q: Is there some sort of new world government in place by 2011?

A: On my worldline in 2011, the United States is in the middle of a civil war that has dramatic effects on most of the other Western governments.

Q: I think Russia is still very likely to attack the United States with nuclear weapons. It's hard to imagine being here to see it.

A: You are also correct, but I want to add a twist to your thinking. Russia's enemy in the United States is not you, the average person. Russia's enemy is the United States government.

Q: Does the current relationship between Arabs and Jews have anything to do with the coming war?

A: Real disruptions in world events begin with the destabilisation of the West as a result of degrading US foreign policy and consistency. This becomes apparent around 2004 as civil unrest develops near the next presidential election. The Jewish population in Israel is not prepared for a true, offensive war. They are prepared for the ultimate defence. Wavering Western support for Israel is what gives Israel's neighbours the confidence to attack. The last resort for a defensive Israel and its offensive Arab neighbours is to use weapons of mass destruction. In the grand scheme of things, the war in the Middle

East is a part of what's to come, not the cause.

Q: Does anything happen in the year 2012? I've heard stories about the world ending.

A: In my 2012, I was fourteen years old, spending most of my time living, running and hiding in the woods and rivers of central Florida. The civil war was in its seventh year and the World War was three years away. Yes, there are unusual events in 2012, but they do not cause the world to end. Unfortunately, I have decided not to discuss events that you or I can do anything about. It is important that they be a surprise. Perhaps you are familiar with the story of the Red Sea and the Egyptians?

Q: How and why do the Arabs and Jews become entangled in the civil war of the USA?

A: They are not directly involved but political situations are dependent on Western stability, which collapses in 2005.

Q: The Arab countries appear to have weapons of mass destruction. Do they use them against America?

A: Not against America, but they are used against each other.

Q: Where is the new US Capitol?

A: The new US Capitol is in Omaha, Nebraska. After the war, the United States had split into five separate regions based on the various factors and military objectives they each had. There was a great deal of

anger directed toward the Federal government, and a revival of states' rights was becoming paramount. However, in their attempt to create an economic form of government, the political and military leaders at the time decided to hold one last Constitutional Congress in order to present a psychological cohesion from the old system. During this Congress, the leaders discovered and decided that coming up with a new and better form of government was nearly impossible. The original Constitution itself was not the problem; it was the ignorance of the people that lived under it.

The year 2008 was a general date by which time everyone will realise the world they thought they were living in was over. The civil war in the United States will start in 2004/5. I would describe it as having a Waco-type event every month that steadily gets worse. The conflict will consume everyone in the US by 2012 and end in 2015 with a very short World War III.

Q: Can you give us some personal stories of your past?

A: I was born in 1998, so I do share some childhood memories with all of you. I remember going to Disney World at Christmas and I remember going to the beach in Daytona. When the civil "conflict" started and got worse, people generally decided either to stay in the cities and lose most of their civil rights under the guise of security or leave the cities for more isolated and rural areas. Our home was searched once and the neighbour



THE TWILIGHT ZONE

across the street was arrested for some unknown reason. That convinced my father to leave the city.

From the age of eight and until I was twelve, we lived away from the cities and spent most of our time in a farm community with other families, avoiding conflict with the Federal Police and National Guard. By that time, it was pretty clear that we were not going back to what we had, and the division between the "cities" and the "country" was well defined. My father made a living by putting together 12-volt electrical systems and sailing "commodities" up and down the coast of Florida. I spent most of my time helping him.

Outright open fighting was common by then, and I joined a shotgun infantry unit in 2011. I served with the "Fighting Diamondbacks" for about four years. (Hearing in my right ear isn't as good as I would like it.) The civil war ended in 2015 when Russia attacked the US cities (our enemy), China and Europe. As unusual and bad as my childhood might seem, I wouldn't trade it for anything.

Africa is not a pleasant place to be in 2036, although I would characterise it as recovering.

Russia and China have always had a very strange relationship. Even the news I see now indicates that continued weapons deals to allies, border clashes and overpopulation will lead to hostilities. The West will become very unstable, which gives China the confidence to "expand". I'm assuming you are all aware that China has millions of male soldiers right now that they know will never be able to find wives. The attack on Europe is in response to a unified European Army that masses and moves east from Germany. Also, please be aware that, from my viewpoint, Russia attacked my enemy who was in the US cities. Yes, the US did counterattack.

Australia is sort of interesting in what is unknown. After the war, they were not very cooperative or friendly (can't blame them, really). It is known they did repulse a Chinese invasion and most of their cities were hit. They have a trading relationship with the US, but I would characterise them as reclusive and ticked off.

The "enemy" that was attacked by Russia in the US was the forces of the government you live under right now.

The war had very profound affects on people and how they relate to each other. As individuals, almost everyone in 2036 is

very familiar with death. We all have stories of loved ones that have died from disease, war or acts of inhumanity. Most of us have even taken part in dishing the same thing out to the other side. As a result, we have become far more compassionate to the ones we love but much less forgiving to those who don't pull their weight. We are more accepting of others' differences in our community because we depend on them [others] to survive. We are also more conservative with our resources and closer to God because, for a period, life on Earth was Hell.

The other major difference is in the concept of good and evil. With multiple worlds come multiple decisions and outcomes. For every good act, there is an equal and possible bad act on another worldline. Taken to the extreme, this must mean that, in God's eyes, there is no total good and total bad in the Superverse. It balances itself out to infinity. I believe we are judged on the decisions we make as individuals, and the good/evil I see on my worldline is an illusion that has no worth to God. My reaction to it is what's important to God. Although this may seem rather heartless, it does allow me to see past the evil that people do and acknowledge the core of potential goodness inside them.

Q: Which country gets the worst in the war?

A: Again, the entire world is affected. Even if you don't take a direct hit, dying crops and no water can ruin your day.

Q: What exactly happens to the water?

A: Yes, radiation affected the water, but that can always be distilled out. There are biological hazards that cannot. In addition, fresh water is hard to come by without talking to someone with a gun first.

Q: Will you readily be able to identify the enemy?

A: They will be the ones arresting and holding people without due process.

Q: How do most people die during the war?

A: In this order: starvation, disease, bullet wounds, radiation.

Q: Nuclear warfare doesn't seem to be the biggest form of fighting in the future.

A: Nuclear war will be very effective at destroying an enemy's economy and the people's will to fight.

Q: John, you say one of the hardest things to do in 2036 is find clean water. You also say you only trust food you've grown. Is any of this a result of your experiences with biological warfare?

A: Yes and no. Yes, biological warfare and accidents do cause a great deal of problems, but the lack of a working infrastructure also hinders the continuation of the food manufacturing you depend on now.

You must realise that *why* people are fighting is more important than what they are fighting with. The conflict was not about taking and holding ground; it was about order and rights. They were betting that people wanted security instead of freedom, and they were wrong.

(Source: *The John Titor website, <http://www.johntitor.com>. Visit the website for more of John Titor's predictions and perspectives.*)



"Excellent! So when do we send it a signal to start bombing the place?"



REVIEWS

BOOKS

Reviewed by Ruth Parnell

HEGEMONY OR SURVIVAL:

America's quest for global dominance by Noam Chomsky

Allen & Unwin, Australia, 2003 (first published by Henry Holt & Co., USA, 2003 ISBN 1-74114-162-1 (278pp tpb)

Availability: Bookstores; Amazon.com

America's quest for global dominance at all costs is an extreme threat to the survival of humanity and our environment. So says Noam Chomsky, the foremost intellectual critic of US policy at home and abroad, in his first major book in a decade.

It took less than a year from the tragic events of 9-11 for the world, Europe in particular, to wake up to the fact that the United States government posed more of a threat to global freedom than did Saddam Hussein. Chomsky considers why the current Bush/neo-con plan for world hegemony (domination) has not come out of the blue; it's part of a "grand imperial strategy" that the US has been pursuing for well over half a century (if not for twice that, closer to home), spurred on in part by "humanitarian interventions" with hidden agendas and the corporations that have much to gain from this global domination drive. Chomsky is at his incisive, logical best, and his arguments carry weight that we can only hope will filter through to ordinary citizens.

The current US government's grand plan for "preventive war" belies its true purpose, i.e., to gain territorial and economic power, and Chomsky explains how this strategy falls within the definition of war crimes and is far removed from what's acceptable under

international law; indeed, this administration is rewriting the lawbooks. These are dangerous times, and democracy is under threat as never before, both in the US and abroad. With new technological advances come ever more frightening possibilities, including the militarisation of space.

The good American people need to realise what their government is inflicting on them and the world at large. In the name of truth, freedom and justice, they need to wake up if we're to have a collective future at all.

WEAPONS OF MASS DECEPTION by Sheldon Rampton & John Stauber

Jeremy P. Tarcher/Penguin, USA, 2003 ISBN 1-58542-276-2 (246pp pb)

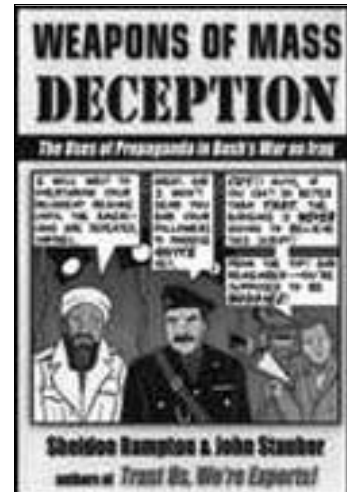
Availability: Penguin Group website, <http://www.penguin.com>

It takes brave Americans these days to stand up and declare that the Emperor is wearing no clothes, who can see through the façade of the Bush neo-conservative agenda for the con that it is. Sheldon Rampton and John Stauber, of the US Center for Media & Democracy (as well as editors of *PR Watch* and authors of *Trust Us, We're Experts!* and *Mad Cow USA* [see Reviews, NEXUS 9/03, 5/04]), go out on a limb to show how propaganda has been used to such powerful effect to win over the hearts and minds of Americans in the US-led War on Iraq and the post-Saddam era.

Unfortunately, Americans who don't access the international media are very ill informed on how foreigners view US government/military actions. That view is not complimentary. The domestic media sources are manipulated so that the general populace is fed a diet of hype that shows their fellow Americans in Iraq as forces of

good combatting evil. They did it before in Gulf War I, and they're doing it again in the sequel. The public is shockingly misled on the number of US casualties, wounded and dead, that are the tragic result of their government's ulterior motive of gaining precious oil resources. While White House officials use repetition, misinformation, fear tactics, doublespeak and other propaganda techniques to create false impressions, e.g., that links exist between Saddam Hussein, al-Qa'ida and 9-11, media commentators apply self-censorship and toe the official line without providing any critical analysis of their government's actions and deceptions. We should ask whether the war on terror is being fought against the wrong enemies, in the wrong places and with the wrong weapons, the authors suggest.

Weapons of Mass Deception can help you fine-tune your spin-detector mechanism and be alert to the "true lies" we're being fed.



REVIEWS



ANYTHING CAN BE HEALED

by Martin Brofman, PhD

Findhorn Press, UK, 2003

ISBN 1-84409-016-7 (460pp tpb)

Availability: Order online from
<http://www.findhornpress.com> or
<http://www.healer.ch>

Martin Brofman, PhD, believes that everyone has the innate power and ability to heal themselves, as he found out when he overturned a terminal cancer diagnosis in 1975 through relaxation, meditation, visualisation and positive thinking.

He went on to develop a practical healing technique, the Body-Mind Mirror System, which focuses on the physical body as a reflection of the consciousness within. A change in consciousness creates a change in the energy field, and this appears before any change on the physical level. This has enormous implications for how we regard both health and illness. As a Zen teacher told him shortly after his two-month health crisis, "Cancer begins in your mind, and that's where you can get rid of it".

Brofman seems to have drawn much inspiration from the ancient Vedic science of the soul, with its understanding of the energy fields and chakras. These principles are echoed in many other ancient healing systems (the Hawaiian Huna, for instance) and are easily accessed by anyone with the will to self-heal. There's practical information on the law of cause and effect, the reality of subtle bodies and the healing power of love. Brofman covers the broad territory that takes in the human energy fields, past life experiences, healing with white light and with thought-forms, distance healing and self-healing. He includes a number of exercises for feeling and seeing energy and directing it

for healing, as well as a guide to the chakras, their colours and qualities.

As co-creators, we have untapped potential to take charge of our own health and well-being. Brofman's advice and techniques are a sure-fire route to realising our true power.

THE UNTOLD STORY OF MILK: Green Pastures, Contented Cows and Raw Dairy Foods

by Ron Schmid, ND

New Trends Publishing, Inc., Washington,
DC, USA, 2003

ISBN 0-9670897-4-3 (460pp tpb)

Availability: Order online from
<http://www.NewTrendsPublishing.com>

As governments around the world ban the sale of raw milk in their misguided belief that they are protecting public health, the raw milk movement is on the rise and fighting for what is a common law right.

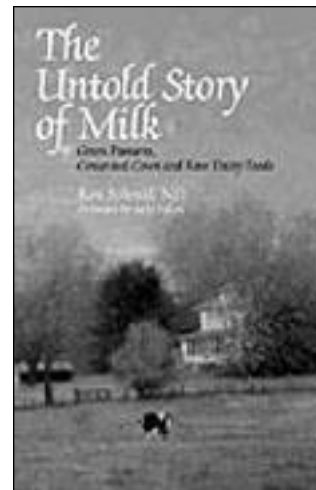
Naturopathic physician and farmer Ron Schmid discusses in his excellent book, *The Untold Story of Milk*, how raw milk and raw milk products (including butter, buttermilk, yoghurt and cheese) have a range of health benefits. The pasteurisation process, on the other hand, destroys essential enzymes and nutrients, making the milk a non-food that causes a variety of health problems for many people consuming it.

Dr Schmid explains how the humble cow, goat and sheep and their bounty are intrinsically linked with the rise and progress of civilisations. Most dairy farmers and their families use raw milk products without any ill effects. In the days before pasteurisation became mandatory, physicians even used to prescribe raw milk to treat a range of health conditions. It's a

microbes versus milieu argument; the enzymes, vitamins and even bacteria in raw milk foods actually *strengthen* the immune system. As for any link between animal fat consumption and heart disease, Dr Schmid explodes this myth. He says the push for pasteurisation came from the USA after the rise of confinement dairies in the 19th and early 20th centuries. People became ill from milk when cows were fed acid waste from distilleries. Pasteurisation was introduced to treat what was *toxic* milk.

We are reminded that milk-producing animals are healthier and more contented when they graze in the open on chemical-free green pastures, without the addition of toxic chemicals or antibiotics in their diets.

Modern industrial agricultural processes have taken us far away from our link with nature. It's time we reconnected. What a shame, though, that we have to fight for our rights to utilise nature's true foods.





REVIEWS

PROFILES OF HEALING – HANDS OF FAITH: HEALERS OF BRAZIL

edited by Bradford Keeney, PhD

Ringling Rocks Press, Philadelphia, 2003

ISBN 0-918172-38-1 (142pp tpb)

Availability: Order online from Ringling Rocks Press, <http://www.ringingrocks.org>

The US-based Ringling Rocks Foundation has a mission to preserve global healing wisdom through education, research and special programs. *Hands of Faith* is a beautifully produced volume that presents the life stories of two renowned Brazilian spiritual healers: Otavia Alves Pimentel Barbosa, and João Fernandes de Carvalho. It's part of the inspirational *Profiles of Healing* series.

These pages are of thick stock and feature striking photographs with gorgeous colour frames and backgrounds as well as wise quotes and touching poetry. The first half features Otavia's story; to access the second, João's story, turn the book over and start again from the beginning! The book comes with a CD with prayers by João and blessings by Otavia in Portuguese, plus three Brazilian musical interludes (one in a *bossa nova* style) by Edu Passeto and Zuzi Alves.

These two beloved elders (Otavia is at least 96, and João has been married for 56 years, to give you an idea) were raised in poor circumstances. They are humble, dedicated spiritual healers who have never charged for their ministrations. Otavia declares she has given her soul to the task of making people's lives a little better; she uses hands-on techniques and lives by the motto of "Love is the power of healing". João turns in faith to Jesus and Mary and has prescriptions enter his mind; although unable to train as a doctor, he's had an interest in pharmacology since his youth. With every cure,

he feels "a joyous party" in his heart. Their stories are told in their own words and translated into English; family members and friends also give their loving tributes.

Editor Dr Bradford Keeney says these two healers "stand out by the purity and strength of their faith"; their "miracles" are a result of being open in a pure, heartfelt way. The book serves to renew our faith in love.

THE BRAZILIAN HEALER WITH THE KITCHEN KNIFE and Other Stories of Mystics, Shamans, and Miracle-Makers by Sandy Johnson

Rodale, USA, 2003

ISBN 0-9670897-4-3 (460pp tpb)

Availability: Order online from <http://www.rodalestore.com>, tel (800) 848 4735 (toll free, North America)

Many NEXUS readers will know exactly to whom the title of this book refers: João de Deus, the Brazilian healer who performs miraculous operations, sometimes with a simple kitchen knife, with the intercession of a host of formerly living beings like St Ignatius of Loyola at his healing centre in the remote village of Abadiânia in Goiás, Brazil. John of God is just one of the many practitioners featured in this book by US journalist, author and social researcher Sandy Johnson, although it seems he in particular has changed her system of beliefs as to what is possible. What they seem to have in common is the ability to reconnect people with their own healing life force.

From her observations, Johnson sees that these gifted healers, all of whom have their own special way of relating to the Divine, are transformers of the mind and soul as well as the body. Indeed, she started on her path of exploration during her own recovery

from breast cancer. Her travels have brought her in touch with diverse types of healers as well as our own self-healing placebo effect. There's Warren Barigian from the Yosemite Valley, who remaps brains; Santa Fe-based shamanic healer Sandra Ingerman, who retrieves the part of a person's soul that flees during illness or trauma; and Auntie Margaret from the Big Island of Hawai'i, who practises the ancient *lomilomi* healing art. Also featured are Idaho housewife Vianna Stibal, who conducts "distance healings" by phone; Gary Brownlee, who has carried on Dr Milton Trager's method of healing polio victims; and Gerry Bostock, an Australian of Aboriginal descent who heals using love, light, crystals and energy. Johnson tells it like it is, unsterilised instruments and all!

These healers have made a profound difference to many people and have their part to play in the new healing paradigm.



REVIEWS



LIVING DANGEROUSLY: Are everyday toxins making you sick?

by Pat Thomas

Newleaf/Gill & Macmillan, Dublin, 2003
ISBN 0-7171-3600-0 (356pp tpb)
Availability: Order online via
<http://www.gillmacmillan.ie>; Banyan Tree,
South Australia, tel (08) 8363 4244

Wouldn't we all love to have glowing health and abundant energy? The fact is that most of us don't feel as well as we'd like to, and are plagued by any number of vague symptoms from headaches and digestive disorders to fatigue and mood swings. All too many suffer from major illnesses such as arthritis, cancer and diabetes. Why?

In her well-referenced book, *Living Dangerously*, UK author and psychotherapist Pat Thomas (editor of the alternative health newsletter, *PROOF!*), says we don't have these symptoms without a reason—and that is that we are being poisoned by the toxins in our everyday environment. We have to be extremely vigilant if we're to reduce this "silent stress" from toxic overload and find our path to glowing good health.

These environmental toxins include *airborne pollutants* such as benzene, xylene and volatile organic compounds, found in perfumes, petrol and consumer products; *endocrine disruptors* present in pesticides, plastics, toiletries, flame retardants and industrial pollution; *electromagnetic fields* linked with electrical equipment such as TVs, computers and other home appliances; *pesticides* found in and on foods and in our water supply; and *heavy metals* such as mercury in dental amalgam and those found in some fish, food preservatives and cosmetics. The cumulative effects of just one of these toxins is bad enough; but when several are

combined, they eventually cause a staggering overload of the immune system.

Thomas deals with all these stressors and suggests practical ways we can reduce our overall toxic burden. These steps can be as simple as eating organically grown food and avoiding processed food, taking specific nutritional supplements, reducing EMF exposure; and drinking clean, non-fluoridated, non-chlorinated water. She includes tips on encouraging a zest for life, and useful contacts for consumers who want to learn more about toxins and their effect on health.

THE BEGINNER'S GUIDE FOR THE RECENTLY DECEASED

by David Staume

Llewellyn Publications, USA, 2004
ISBN 0-7387-0426-1 (171pp tpb)
Availability: Llewellyn Worldwide, website <http://www.llewellyn.com>

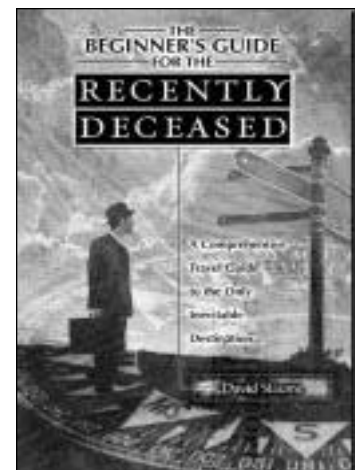
There have been books written about people who've had near-death experiences, but nothing much from anyone who has been to "the other side" and returned to tell the tale. While the author is still very much among us, his "essential reading for the pre-deceased", as the back cover blurb suggests, is the next best thing to actually being there.

David Staume, an Australian naturopath and herbalist, has done the hard work by studying the body of knowledge provided by science, metaphysics and theosophy and distilling it into an accessible, often humorous, form for pre-departed people such as ourselves. If you're going to embark on a journey, you want some information to pave the way for what you may encounter, so why not be armed in advance for the ultimate destination, death—a journey we all have to take? It helps to know how to prepare for

this final departure and to know there is something on the "other side". Life beyond this one is a reality because consciousness survives death, says Staume and an array of spiritual teachers who have inspired him.

Staume presents a conceptual framework based on his forays into metaphysical wisdom to give the reader a "feel" for the experience of being deceased and finding a way through post-death consciousness and astral territory. The entertaining tone of the book is refreshing: why be morose about this ultimate journey of a lifetime when there are so many adventures ahead, though not quite in the same physical sense that we know now?

If consciousness is an energy, Staume says the Universe will tend towards conserving that energy, thus logically it's more than likely that consciousness survives after death. But why wait till then when you can prepare now? In the end, this book shows how we can make the most of living life creatively in the here and now!





REVIEWS

UNLOCKING ALIEN CLOSETS: Abductions, Mind Control, and Spirituality

by Leah A. Haley

Greenleaf Publications, TN, USA, 2003

ISBN 1-883729-08-4 (312pp tpb)

Availability: Greenleaf Publications, website <http://www.greenleafpublications.com>

This is the fourth book by Leah A. Haley, a Tennessee-based publisher, public accountant, holder of two masters degrees—and an alien abductee. She published her first book, *Lost Was The Key*, in 1993, three years after she began to recall two alien encounters in her past. She then started having frightening new experiences involving different types of aliens as well as OMAGS—"obnoxious military and government scoundrels"—who once kidnapped and threatened her at gunpoint, she says, to exact her silence. But she hasn't kept quiet.

Haley's story, which covers 1992 to early 2003, will ring true for so many people because of the commonalities of their experiences. Thus Haley feels her story is less about herself and more about humanity. However, she does point out that she's not read too widely about others' experiences lest she "contaminate" her own testimony.

Most people who've alien abduction experiences find it hard enough to cope, let alone admit such "high strangeness" to outsiders. Trying to understand the reality of aliens and the abduction experience with its related phenomena such as missing time and strange marks on the body is one thing; coming to terms with a government cabal exerting mind control and manipulating her thoughts and even her love life, harassing her with unmarked black helicopters and cooperating with aliens is another.

Haley is quite religious, and after prayer or Bible-reading she began to receive visions, and then telepathically transmitted messages and symbols (some reproduced in the book) from an intelligent source whom she calls "the Silent Voice". This brought on many wonders as well as uncertainties as to whether what she'd been told was the truth. Yet, her faith in the Divine helped her through these crises and remains unshakable amidst what she sees as "a spiritual war" on Earth. She encourages others to connect with their faith and live without fear.

CLOAK OF THE ILLUMINATI

by William Henry

Adventures Unlimited Press, USA, 2003

ISBN 1-931882-23-1 (214pp tpb)

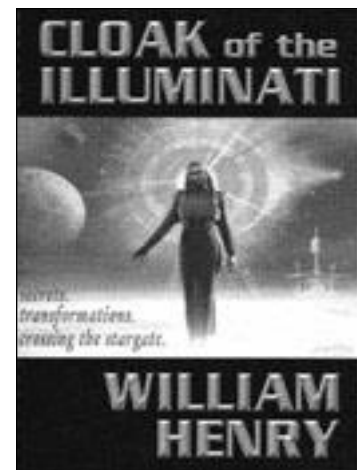
Availability: NEXUS offices; Adventures Unlimited, www.adventuresunlimited-press.com; www.adventuresunlimited.nl

This book is a veritable feast for those who seek knowledge from the ancient wisdom traditions passed down through the ages. Author William Henry aptly calls himself an "investigative mythologist", and his prime focus is on researching ancient codes that have served to help individuals find higher vibrational levels of experience and self-healing. These keys are still relevant today for the evolution of humanity.

In *Cloak of the Illuminati*, his ninth book, he suggests that humankind is poised to don a "power suit" in the 21st century—a garb that incorporates genes, bits, neurons and atoms and might even be tuned to the frequency of love and allow interdimensional time travel via stargates and wormholes. Henry's view is informed not just by modern scientific progress but by evidence for technological leaps made by the ancients,

whether in Egypt, Sumeria, Mongolia or Mexico. These ancestors had keys to the stargates, he says, and the Maya prophecy supposedly points to the return of these time portals in 2012 when the Earth aligns with galactic centre. The point is to prime the individual for this alignment and any accompanying possibilities for enlightenment.

One of the amazing parallels Henry makes is between a 2nd-century Chinese manuscript featuring the Meru pillar and the layout of the Tennessee Bicentennial Capitol Mall in Nashville. This structure has to be seen to be believed: it's a showcase of sacred geometry and seems designed to promote bioenergetic flow in those who enter its realm. Henry's analysis of the geometry and symbolism of these designs serves to confirm that many of the keys to the ancient wisdom teachings are still accessible to those who care to look. For a sneak peek at these investigations, visit the author's website at <http://www.williamhenry.net>.



REVIEWS



BIOTECH TIME-BOMB

by Scott Eastham

RSVP Publishing, Auckland, NZ, 2003

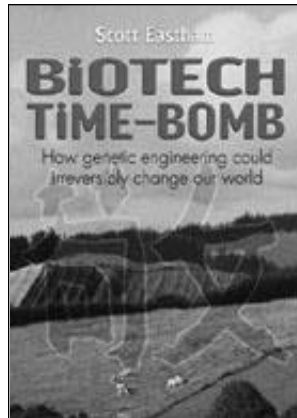
ISBN 0-9582182-2-6 (128pp tpb)

Availability: RSVP Publishing, website

<http://www.rsvp-publishing.co.nz>; Banyan Tree, South Australia, tel (08) 8363 4244

While the products of genetic engineering are being foisted upon much of the world's populace, this gem of a book argues for a pause so we can reassess our values—whatever our economic rationalist culture has left of them. It's also a call for *real* dialogue between proponents and critics of gene science, in the hope that both sides, together, will see the bigger picture.

Written by Scott Eastham, Senior Lecturer in the School of English and Media Studies at Massey University, New Zealand, *Biotech Time-bomb* has particular significance not just for the world but for his native country, whose government decided in October 2003 *not* to renew a GE crop moratorium. Now NZ agritech corporations are inserting



human genes into cows, supposedly to create better milk for human consumption!

How we got to this level of madness is part of Eastham's erudite argument, and it touches on the history of speech, literacy (including the Western phonetic alphabet vs Chinese bigger-picture ideograms), printing, code-writing, automation and the digital revolution. These are relevant to the discussion because each involves a control paradigm. In the case of biotechnology, the DNA code is but a fragment of the whole: decoding the human genome can barely lay out the map, let alone describe the territory.

So how can biotech scientists hope to control their creations once they're out of the lab, when they cannot foresee the effects over time? How will they be able to deal with irreversible effects on the environment and on human and animal health from the biotech revolution? They can't. So how can we tame their arrogant thinking? Essential to dealing with this, Eastham proposes, is

for all of us, including the scientists and the corporations/organisations that fund their work, to realise that life is a precious gift; that it is complex and thus unpredictable when tampered with and released at large.

We all need to wake up before we destroy ourselves, our environment and our future.

RECODING NATURE

edited by Richard Hindmarsh and Geoffrey Lawrence

UNSW Press, Sydney, Australia, 2004

ISBN 0-86840-741-0 (246pp tpb)

Availability: UNIREPS, tel +61 (0)2 9664

0912, <http://www.unireps.com.au>

The huge ethical, social and environmental issues associated with the biotechnology revolution of recent decades are looming larger with the "progress" of science, yet the public has had little input into the debate. Perhaps it's because people regard the subject as too hard to grasp. However, it would be a grave mistake to leave all these decisions to the scientists, corporate technocrats, bureaucrats and politicians. For the sake of preserving our future, it's up to all of us to become better informed.

This compilation, *Recoding Nature*, is a great source of information from a variety of contributors from Australian and New Zealand, who give perspectives on the scientific, health and environmental questions arising from biotechnology—whether from growing and consuming genetically engineered foods, developing and using GE designer drugs, applying gene therapy techniques in medical treatments, or creating cloned animals and even humans. The book is edited by Queensland academics and GE critics Richard Hindmarsh and Geoffrey Lawrence. The foreword is by UK geneticist Dr Mae-Wan Ho, who, through the Institute of Science in Society, is leading an international group of scientists who are issuing strong warnings on the risks of going down the GE path. One of the approaches reflected in the compilation is the growing trend towards organic farming and consumption, as seen in the pieces from Hugh Campbell of Otago University, NZ, and Scott Kinnear, organic farmer, activist and spokesperson for the Biological Farmers of Australia. By definition, organic growing must not be contaminated by GE.

Another issue highlighted in the book is "biocolonisation", where the genetics of indigenous peoples and plants are subject to commodification without reward for the owners of those genes. People all around the world are having to become activists to protect their genetic heritage from pillage by biotechnology corporations.

The compilation gives solid information on these controversial issues of our times.



REVIEWS

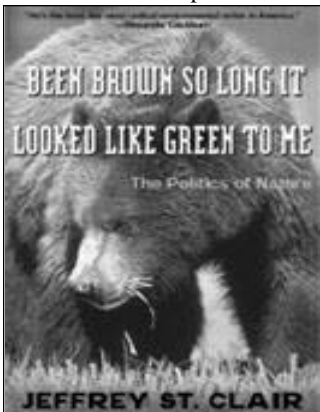
BEEN BROWN SO LONG IT LOOKED LIKE GREEN TO ME

by Jeffrey St Clair

Common Courage Press, USA, 2004
ISBN 1-56751-258-5 (407pp tpb)
Availability: Common Courage Press,
orders-info@commoncouragepress.com,
<http://www.commoncouragepress.com>

Touted as "the most radical environmental writer in America", Jeffrey St Clair is scathing in his review of the state of the environment and how our natural world has been ravaged by corporate marauders, corrupt politicians, apathetic bureaucrats and the complicit corporate media.

The mostly US-centric articles compiled for this book were written between 1995 and 2003, and St Clair sets the scene in his introduction, "The Map Is Not The Territory", where he describes the devastating effect of a "century of unbridled clearcutting" in the Cascades region of Oregon, near where he and his family moved in 1990. It's not just the landscape that's been destroyed; entire ecosystems have been wiped out.



Meantime, the grassroots environmental groups "couldn't survive the Clinton ice age" and by the mid-1990s mainstream environmentalism became tongue-tied by foundation grants. The situation has deteriorated ever since, as he documents in his chapter on the Bush Administration and its anti-environment agenda. Yet there's still reason to be optimistic, and St Clair praises a long list of activists prepared to shake things up.

The Wild Matters section highlights how compromised the natural world has become, the article on "Oceans without Fish" being just one shocking exposé. Toxic Nation looks at, for example, how the huge chemical corporations like Monsanto want us to eat a diet of dioxins, and Power Plays considers the havoc wreaked by oil companies in Alaska, among other tales of environmental rape and pillage. On Native Ground deplores how Native Americans continue to be ripped off by stupid white men's agendas, and The Military Menace shows the eco-

destruction from nuclear testing, chemical weapons and hazardous waste.

There's so much more in this book, but we're left with the overwhelming impression that we must become much more politically active if we're going to put a stop to all this governmental and corporate carelessness and greed. Top marks to St Clair!

TRANSFORMING THE GLOBAL BIOSPHERE

by Elliott Maynard, PhD

Arcos Cielos Research Center, USA, 2003
ISBN 0-9721713-1-2 (310pp hc)
Availability: Arcos Cielos Research Center, <http://www.arcoscielos.com>

Planet Earth and her inhabitants are at a crossroads with global environmental, social and economic crises. We need practical new strategies for sanity and sustainability, as Elliot Maynard, PhD, proposes in *Transforming the Global Biosphere*. Dr Maynard, who has a background in zoology, oceanography, ecology and consciousness research, co-founded in 1978 (with his wife, Sharon) the Arcos Cielos Research Center in Sedona, Arizona, as a non-profit centre for developing new paradigms in science, education, ecology and human potential.

Dr Maynard argues for a "transformative revolution on a global scale", one that requires new ways of thinking and living. He says we must change our ways to live within "an inspired and self-imposed global constitution of sustainable limits" at all levels of society. He discusses 12 "metastrategies" for achieving this, e.g., via a transformative education system, a sustainable global resource management plan, enlightened population management, a global shift to clean, renewable energy, a global "green revolution", and new global programs for waste reduction, treatment and recycling. While he points out the massive problems in these areas around the world, he has plenty of ideas for how to solve them.

Other strategies are: establishing guidelines for sustainable human ecologies (including "slow cities"), providing clean, energy-efficient global transportation systems, shifting from consumption-driven to ecologically appropriate lifestyles, changing from a meat-based to a protein-based diet, creating and distributing "superfoods" like spirulina, and applying the new "consciousness technology" for cultural transformation.

This is all a huge order, especially considering the forces that want to maintain the status quo, but new strategies are essential if we and our world are going to survive and prosper in the future. Dr Maynard has much to offer in the debate and makes us realise how much we take for granted.

REVIEWS



D V D S

Reviewed by Duncan Roads

THE MEIER CONTACTS: The Key To Our Future Survival

They Fly! Productions/Michael Horn, 2004
Distributor: They Fly! Productions, PO Box 5163, Playa del Rey, CA 90296 USA, tel +1 (310) 745 9009, website <http://www.theyfly.com>

While many so-called UFO researchers proudly proclaim the Billy Meier story is an elaborate hoax, I wonder just how many know of the information presented here: e.g., that Meier has survived 19 documented assassination attempts; that he's had ongoing contact with these ETs for over 60 years; that nobody has ever proven any of the thousands of close-up photos and films of UFOs to be faked (despite, at



times, constant surveillance from neighbours and sceptics waiting to catch him "in the act"); that he was given physical evidence by the aliens for scientific analysis, with astounding results; that dozens of times he was given specific scientific information and predictions that have since proved true; and that he has only one arm.

Part 1 of the documentary overviews the evidence on all levels for the genuineness of Billy Meier's claims. Parts 2 and 3 look at the prophecies, predictions and scientific information given to Meier. Some of this is truly amazing and very specific material. No wonder some people want him shut up!

Parts 4, 5 and 6 explore what we can do about the future. I found myself in almost total alignment with the principles espoused: self-responsibility, adherence to truth, etc.—nothing new, you might say, but it would indeed be new if more of us could put these principles into practice!

There is much on this DVD for everyone, and everyone who watches it will be most stunned at what they see and hear.

GOVERNMENT GUINEA PIG: When Uncle Sam Wants You...

Guinea Pig, LLC/Jan C. J. Jones, 2004 (104mins)

Distributor: Guinea Pig, LLC, PO Box 2399, Monument CO 80132, USA, tel +1 (719) 487 0435, fax +1 (719) 488 3414, <http://www.governmentguineapig.com>

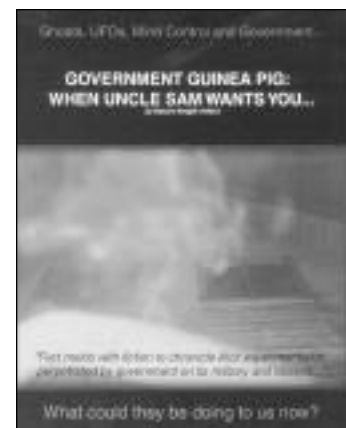
This is one of the most informative and gripping docu-dramas I have ever seen. Couched in a fictional setting (reminiscent of *Blair Witch Project* meets *X-Files*), this film is really produced as a documentary centred around the fascinating Steve Lee case. This is a successful approach because, in between interview clips with Steve and other witnesses, the film informs the viewer on most of the important aspects and facts surrounding government experimentation on unwitting citizens.

No conclusion is presented to explain the Steve Lee case. The viewer is left with an open mind as to whether the unusual phenomena are the result of ghost/poltergeist activity, aliens/UFOs, secret government mind control experimentation or even hyperdimensional portals/intersections.

The film takes an interesting turn about an hour in, when it starts to connect some of the "names" associated with nonlethal weapons research, remote viewing, human experimentation, UFOs and more. One could easily draw several conspiracy theories from this section alone. Names include the infamous Gordon Novell and Col. John Alexander, the Monroe Institute, Colin Bayer, Robert Bigelow and the National Institute for Discovery Science.

I liked the film because it didn't tell me what to conclude from the information presented. One is left with many questions, numerous research links to follow up and, above all, a healthy distrust of the government/military/industrial complex.

Recommended to anyone who suspects they're a victim of covert experimentation.





REVIEWS

MUSIC

Reviewed by Richard Giles

AURORA

by Michael Atherton and James Ashley Franklin

Celestial Harmonies, 2003 (63mins)
Distributors: **Aust**—Planet Distribution, tel (02) 9356 4866; **UK**—Discord Dist., tel (0)1892 863 888; **USA**—Celestial Harmonies, tel (520) 326 4400, website <http://www.harmonies.com>

Celestial Harmonies has a superb catalogue of specialist music dedicated to unusual world sounds. This album, *Aurora*, is more a piece of research into the effects of placing music into the sorts of spaces it's not normally found. It combines the Japanese shakuhachi and koto with guitars, marimba, double bass and a "ruined" piano. Experimenting with a "meditative intent" on the instruments, Atherton and Franklin produce a beautiful and relaxing exploration of the inner life of sound. An engaging album.

SAHARA LOUNGE

by various artists

Putumayo, USA, 2004 (48mins)
Distributors: **Aust**—MRA Ltd, tel (07) 3849 6020; **UK**—Pinnacle Imports, tel 01689 870622; **USA**—Putumayo, <http://www.putumayo.com>

In recent years the music and instruments of the Middle East have been blended with cutting-edge electronica, as on this new Putumayo release. *Sahara Lounge* presents a dozen tracks by performers from Egypt, Iran, Lebanon, Morocco, Algeria, Turkey and the UAR. Though traditionalists may find the upbeat mixes too much, there's merit in combining Western and Eastern producers to feature new music. Mixing Algerian Rai, Berber and Sufi with dub, beat and hip hop gives some renowned sounds on a captivating album.

FLAMENCO ARABE

by Hossam Ramzy & Rafa El Tachuela

ARC Music Prodns, UK, 2003 (72mins)
Distributor: **UK**—ARC, tel +44 (0)1342 328567, <http://www.arcmusic.co.uk>

Recorded with four world-class musicians, this album comes as an exhilarating feast of flamenco and Arabic rhythms, including Hossam Ramzy's excellent percussion. The guitarist, Rafa El Tachuela, has a distinguished record in flamenco music. His ensemble, La Pasión Flamenca, travels Europe, performing classical and modern dance styles. The most outstanding track, "Silk Route Suite", is in four parts with the Arab and Indian origins of flamenco illustrated. Fascinating and captivating.

SEFARAD

by Sefarad

ABC & Lotus Foot Music, Australia, 2003 (64mins)

Distributors: **Australia**—Lotus Foot Music, tel (02) 4782 5524, website <http://www.lotusfoot.com.au>

The Hebrew word for Spain is "Sefarad".

It also means a people—the Jewish population of Spain, with a long history in the country. Between the 9th and 12th centuries, Spain was under Arabic control and the Jewish and Muslim worlds regarded Andalusia as the intellectual jewel of their cultures. Christians, Jews and Arabs shared many aspects of music, art, science and philosophy. This album by Kim Cunio and Heather Lee (at times known as Oscar and Marigold), Imogen Granwal and Jonathan Holawell blends Islamic dance, Jewish music and mediaeval Spanish song and poetry in an exquisite collector's album.

HECHO EN CUBA

by Ibrahim Ferrer, Rubén Gonzales and Compay Segundo

Central Station, Australia, 2004 (47mins)

Distributors: **Aust**—MRA Ltd, tel (07) 3849 6020; website <http://www.centralstation.com.au>; **USA**—Isba Music Entertainment

The Cuban music revival of the last seven years has flung the magic of the traditional Cuban sound out into the streets via the classic 1997 *Buena Vista Social Club* (NEXUS 5/02). Since then, that group's maestros have made their mark on the world scene. *Hecho en Cuba* is a collection of selected releases of several years of Cuban albums. This is a laidback journey through Cuba's musical traditions, featuring the best of Buena Vista and friends. Classic tracks include "Tula's Room" from the *Buena Vista* film, "Ay Candela" from Ibrahim Ferrer, and "Perhaps, Perhaps, Perhaps" featuring Omara Portuondo. An album that's guaranteed to get your hips moving.



Continued from page 25

12. Use plants for filtering chemicals from the air in your home. Even chemicals emitted from new carpets or curtains can be filtered by common household plants. For instance, Boston ferns can detoxify 1,000 micrograms of formaldehyde from the air in one hour.²⁵

13. Get exercise. Sweating eliminates all kinds of chemicals that would otherwise be eliminated through the body's other excretory organs (the kidneys and bowel).

14. Avoid pet products such as flea collars and washes which contain toxic substances which are dangerous to animals but also get transferred to pet owners.

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About the Author

Dr Sherrill Sellman, ND, is the author of the best-selling books *Hormone Heresy: What Women MUST Know About Their Hormones* (GetWell International, 1996, 2001, 4th edition) and *MOTHERS: Prevent Your Daughters From Getting Breast Cancer*, as well as an international lecturer and women's health advocate. To subscribe to her free monthly newsletter, go to <http://www.ssellman.com>.

Sherrill will facilitate a Women's Rejuvenation Retreat in Australia in November 2004; call 1800 644 733 in Australia for details.

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created by the scientific establishment's habit of suppressing or ignoring disconfirming evidence.

The evidence discussed in this article suggests that the accepted picture of the universe, from the largest down to the very smallest elements, is wrong almost in its entirety and that a revolution in physics is overdue. This is bad news for mainstream physics, which is still under the delusion of getting closer to a "theory of everything", but good news for the rest of us.

Pick an anomalous phenomenon at random, and the odds are that science has dismissed it because it is "impossible according to the known laws of physics". This "paradigm paralysis" has caused and is still causing great suffering to humanity. Free, pollutionless energy from cold fusion, aether energy or environmental energy would permanently end our addiction to oil and allow the developing world to catch up. It would enable large-scale desalination of sea water and thus prevent the impending water crisis. Combined with antigravity, it would lead to a revolution in transportation and a renaissance of space exploration. It would enable

humanity to colonise the solar system and even travel to the stars. But none of these possibilities is even researched by mainstream science, since they are considered *a priori* impossible.

Another field that is profoundly affected by the current state of ignorance of mainstream physics is medicine. Non-toxic, cheap and effective modalities such as homoeopathy, acupuncture, energetic and spiritual healing remain on the fringes of medicine because they are premised on the existence of a vital energy (also known as *chi*, *ki*, *prana*, *orgone* and under many other names) which does not exist according to mainstream physics.

It is tempting to speculate that the suppressed aether is identical to this vital energy. If that speculation is correct, then the impending paradigm shift in physics will trigger a paradigm shift in medicine, biology and psychology.

Therapies and spiritual practices that have long been ridiculed as based on superstition and ignorance of the laws of nature will become scientifically accepted and widely used.

Parapsychology, no longer hampered by the inability of science to account for the

interconnectedness of life, will become a mainstream subject.

The ideology of ego-based materialism, which lies at the root of most problems facing our civilisation today, will collapse, as it will no longer be seen to be backed by the full faith and credit of modern science.

In short, the paradigm shift in physics will trigger a technological and spiritual transformation that will leave no aspect of human society untouched.

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About the Author:

Rochus Boerner is a PhD student at the Department of Mathematics and Statistics at Arizona State University. He has a Master of Natural Science (MNS) degree in mathematics and computer science and is currently finishing his dissertation.

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A new science for a new century

Many societies of the 21st century have matured beyond the unfounded fears and superstitions that may have limited the perspective of their ancestors. As more people around the world have better access to education, ideas, information and the world at large than ever before, they have become increasingly resistant to traditions belonging to bygone eras and are more questioning, critical, discerning and independent in their thinking.

Consistent with this general shift towards transparency, it is possible today to study the out-of-body experience within formal, structured, academic environments. In Brazil in 1989, for example, a new science, conscientiology, was proposed for the study of consciousness (individual essence, soul or spirit) with rationality and logic, free of all dogma, rituals and mysticism. This relatively new science takes into account all the attributes of the consciousness, its phenomena (including the out-of-body experience), and the fact that it has multiple lives and can manifest both inside and outside the physical body.

The main premise of conscientiology is participatory research. In other words, researchers, students and all interested individuals are encouraged to have their own experiences and verify the true nature of their existence for themselves by using the OOBEx as their main research tool.

The science of projectiology is a sub-discipline of conscientiology, exclusively dedicated to the investigation of the out-of-body experience and related phenomena.

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About the Author:

Sandie Gustus is the Director of Marketing and Communications with the International Academy of Consciousness (IAC) – UK. She joined the IAC in 2002 as coordinator of its activities in Geneva, Switzerland, where she was working with the United Nations, and took up her post at the IAC's London office in 2003.

The IAC is a non-profit scientific and educational organisation dedicated to consciousness studies and research. Its origins date back to 1981 with the creation in Rio de Janeiro, Brazil, of the Center for Continuous Consciousness, the brainchild of Waldo Vieira, MD, author of *Projectiology* (2002), *Our Evolution* (1999; reviewed in NEXUS 7/06) and *Projections of the Consciousness* (1997; reviewed in 7/03). Dr Vieira's books and related videos, such as *Out-of-Body Experience: A Glimpse of Immortality* (2000; reviewed in 8/01), can be purchased through the IAC's website, <http://www.iacworld.org>.

Sandie Gustus can be contacted at: IAC – UK, 3rd Floor, 45 Great Cumberland Place, Marble Arch, London W1H 7LH, UK, tel/fax +44 (0)20 7723 0544, email London@iacworld.org.